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TEXTUAL DIMENSIONS OF KHYBER PAKHTUNKHWA ENACTED LAWS: A LEXICO-GRAMMATICAL ANALYSIS

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ABSTRACT

This study investigated multidimensional patterns of lexico-grammatical variation in a corpus of enacted laws in the province of Khyber Pakhtunkhwa using the Multidimensional Analysis framework introduced by Biber in his work, Variation across Speech and Writing. This study explored how different categories of laws that were enacted by Khyber Pakhtunkhwa differ across textual dimensions. The research was conducted over a sample of 14 categories consisting of 70 enacted laws including university, finance, ad hoc, benefit and allowance, court, fund, health, land and property, law, loan, statutory bodies, revenue and tax, women, and repeal acts. The legal texts of these categories of enacted laws were analyzed using the multidimensional analysis framework on six dimensions of linguistic variance. The results of this study showed the differences in lexical and grammatical structures that are embedded in the province's enacted laws. These fourteen categories were found to significantly vary from one another along all six dimensions of the 1988 model of variation and to exhibit significant variation in the use of lexico-grammatical elements such as vocabulary, word order, and sentence structure. The categories featured high features of nouns, present tense verbs, adjectives, phrasal coordination, predictive modals and demonstratives, which rendered their textual dimensions nonnarrative, persuasive, situation independent, abstract and informative, and not randomly but as the result of a number of factors, including context, goal, register and audience. This study's findings contribute crucial information on linguistic variation in Khyber Pakhtunkhwa's enactment discourse and offer an insight into the corpus oriented approach to the study of legal language. The findings of this study will help to improve the communication between Khyber Pakhtunkhwa's linguists and legal professionals. It will enable them to communicate and understand the usage of legal register (legislated laws). Future researchers may decide to focus on one or more dimensions depending on their requirements and areas of interest.

Keywords: *Textual Dimension, Lexico-grammar, Khyber Pakhtunkhwa's enacted laws, multidimensional analysis.*

Introduction

Lexico-grammatical variation is a widespread phenomenon in human language. The term itself is fascinating and complex, and refers to systematic and rule governed differences in word and grammatical usage across and in different linguistic contexts and registers. People use language differently in different communication circumstances and make different lexico-grammatical options. The term used to describe variation in language is called register. (Moreno, 2006) explains that register is the best way that a message would be presented based on the social environment that the message is delivered.

Legal language is a technical language, that is, a language used in legal texts — court opinions, statutes, regulations, contracts, etc. — in its own right, containing legal norms unique to it which prove the inseparability of form of knowledge from its content and real, primary meanings. Other written and spoken languages are distinguished from it, as it has a formal and technical vocabulary, complex grammar, and specific terminology, and also a style (Asghar, 2014). Legal language is a specific speaking and writing style that is crafted and created, mainly, for the legal field (Tiersma, 1999).

Lexicogrammar or lexico-grammar is the level of language combining syntax (grammar) and lexis (vocabulary) into one. On this level, this interface between words and grammatical structures is defined by their dependence (Sardinha, 2019), at this level, one level dependent on the other, rather than being independent. We refer to differences in how words and grammar are used among or across different groups of speakers or in different situations as lexico-grammatical variation. It can mean word order variations, changes in the lexicon, in verb tenses, and so forth.

Khyber Pakhtunkhwa is one of the four provinces of Pakistan. It is a multilingual province, with Pashto and Hindko being the two most widely spoken languages. The province has a rich history of enacted laws that date back to the time of the British colonial era. A law is considered enacted when it has been formally and officially approved by a legislative body, such as a parliament including national and provisional assembly, and signed by the appropriate executive authority, which is a governor or president. This study investigates lexical and grammatical variation and Biber's (1988) Multidimensional Analysis framework is the appropriate framework to examine register variation in this particular context (Biber, 1988). It emphasizes that registers can be determined by looking at co-occurrence patterns of linguistic factors or characteristics instead of concentrating on one or a small number of linguistic variables.

For the case of Pakistan, a multidimensional analysis model was used to analyze different genres. (Ahmad & Ali, 2017) studied the linguistic variation of press reportage in Pakistan print media. Using multidimensional analysis, (Fatima, 2023) investigated linguistic variation in editorials of Pakistani English newspapers in order to identify: Linguistic variation in the context of textual dimensions model; and distinct language features. In (Shakir, 2014), prospectuses from Pakistan, the United Kingdom, and India were examined along Biber's dimension of "involved versus informative production" (Biber, 1988). Multidimensional analysis was used by (Asim & Alvi, 2016) to study the editorials in Pakistani English newspapers. Pakistani environment academic writing was also investigated by (Begum, 2016). Several studies have been conducted on various registers (Asghar et al., 2021), (Asghar, 2014), (Wang, 2023), (Aryadaust & Tao, 2024), (Biber, 2019), (Özyildirim,

2011), (Ali, 2023) etc. However, a substantial research gap still exists on lexico-grammatical variations within the enacted laws of Khyber Pakhtunkhwa. The present study bridges this gap by providing a multidimensional corpus-based analysis of the lexico-grammatical features manifest in the legal texts of Khyber Pakhtunkhwa.

Research Question

The present study set itself to find the following primary research question:

How do various categories of Khyber Pakhtunkhwa enacted laws differ across textual dimensions?

Literature Review

Lexico-Grammar

According to (Sinclair, 1991) theory of lexicogrammar, there is no difference between grammar and lexis, or between grammar and lexis, they are so interdependent that it is impossible to study them separately. There are specific lexical items in specific patterns and there are specific patterns with specific lexical elements. The system of choices we make in putting words together to make meaning is lexicogrammar (Martin, 2003). Register, or variation in language use according to different social contexts, can be studied by means of lexicogrammar.

Legal Language

Legal language functions as a specialized linguistic form with characteristics such as precision and formality along with complexity. Shuy (2003) shows that legal language serves multiple legal settings from courts through legislatures and law firm operations. Legal discourse exists as an official language system which demands specialized aptitudes for both interpretation and composition (Gibbons, 2003).

Historically law used straightforward language which remained easy to understand (Smith, 2019). The legislation remained simple at this point which made precise language unnecessary. As law progressed through time legal language progressively became more intricate yet specialized because of three key factors associated with legal evolution: growing requirements for specific expressions in lawmaking and the influence of foreign languages on legal domains and professional developments within the legal sphere.

During the early Middle Ages Europe used Latin as its leading legal language. Many European legal systems adopted Latin because this language served as the primary communication tool both for religious institutions and academic institutions and Roman law (Shali, 2018). The revival of Roman law study in the 12th century brought a flood of Latin legal terms into the European linguistic landscape. Beginning in the 13th century the first European law schools started operations and these institutions taught their courses through Latin as their primary language. The

standardization of European legal terminology experienced additional advancement because of this development.

During the 14th and 15th centuries courts started regularly using vernacular languages instead of Latin in their legal documents. During a historical transition local languages took over from Latin to become the official language of law. Legal use of Latin persisted during this time mainly within international treaties and Church law documents (Haugen, 1972). During the 16th and 17th centuries the push to create legal codes gained momentum. The development of national legal codes requested vernacular languages as document medium during this period. Inside countries the 18th and 19th centuries witnessed additional standardized legal terminology. National states emerged alongside requirements to establish unified legal language which consolidated across many new countries. The legal profession has experienced rising global trends throughout the twentieth and twenty-first centuries. Lawyers and judges who work internationally require a unified legal vocabulary which serves as their common language. Modern legal practice depends on Legal terminology which appears across statutes and regulations along with contracts and court opinions and legal briefs. Most people outside of the legal field struggle with understanding court terminology because it maintains a dense and specialized terminology.

Legal language has been the subject of several studies. (Gustafsson, 1975) examined binominal and multinomial expressions in legal writing. (Finegan, 1982) was concerned with forms and functions in testament language. (Shali, 2018) explores the theoretical, descriptive and practical aspects of legal speech and communication as they are found in various systems, communities, languages and cultures. In (Atias, 2006) 'Legal Causality and Criminal Intent in the Legal Discourse', the language elements used to structure causality in court were examined. The study results revealed that criminal speech uses temporal conjunctions and causality to emphasize concurrent activities.

In another study (Fakuade & Sharndama, 2012) looked at how coherent devices were used in four popular and professional legal texts. The 1976 model by Halliday and Hassan was employed for that purpose. The analysis showed that referring expressions and coordinators are commonly found in both types of texts. In addition to examining linguistic characteristics, (Maazi, 2007) examined forty judgments made in Europe and English/Irish. He concentrated on how the two kinds of judgments differed in their move structures and how the reporting word "HOLD" was utilized. The tool was found to suggest an authoritative position taken by the judges in all of the judgments, according to the results.

The textual structure of enacted laws in Khyber Pakhtunkhwa reflects the complexity of lexico-grammatical variations that warrant a detailed linguistic investigation. Studies such as Ali et al.

(2019a) highlight the significance of conversation analysis in understanding linguistic principles, which can be applied to interpret legal language. Similarly, the role of nonverbal communication, including paralinguistic features, has been explored by Ali et al. (2019c), shedding light on the interplay of explicit and implicit communication strategies in legal discourse.

A comparative analysis of semantic density, as demonstrated in sacred texts (Ishtiaq et al., 2021a), offers a methodological lens to study lexical choices in legislative documents. Moreover, transliteration challenges discussed by Ishtiaq et al. (2022b) highlight the potential phonetic inconsistencies in multilingual legal texts, particularly when transitioning between Urdu, Pashto, and English.

Syntactic analysis, such as the application of Chomsky's X-bar theory to Pakistani languages (Ishtiaq & Gill, 2024), provides a framework to investigate structural patterns within the legal corpus. Similarly, parallel linguistic systems (Ishtiaq et al., 2022c) emphasize the interdependence of grammatical structures, crucial for ensuring coherence and clarity in legislative language.

The integration of feminist and critical discourse perspectives (Gill et al., 2025) underscores the importance of inclusive representation within legal texts, which may influence public perceptions and societal equity. Punctuation errors, a key focus of Ali et al. (2020a), also play a pivotal role in determining the interpretative accuracy of laws.

Multidimensional Analysis

Multidimensional analysis is a type of statistical analysis that can be used to identify and quantify relationships between multiple variables. It has been used to study a vast range of social and economic phenomena, including lexico-grammatical variation. This programming module only takes plain text documents in the form of '.txt'. The data were analyzed using Biber's (1988) MD analysis model. Through the statistical factor analysis of the 67 variables in the 481 texts, Douglas Biber (Biber, 1988) identified six factors or dimensions of variance in English using multidimensional analysis (MDA):

1. "Involved vs Informational Discourse",
2. "Narrative and Non-narrative Concerns",
3. "Situation- Dependent vs. Explicit Reference",
4. "Overt Expression of Persuasion",
5. "Abstract and Non-Abstract Information", and
6. "On-line Informational Elaboration" (Biber, 1988).

Every dimension contains a collection of language features that may be utilized to examine a specific text. There exists a value in every dimension, both negative and positive; this indicates whether the characteristics are available or not. The MAT tagger, frequency, and percentages are utilized to detect these linguistic aspects in the data corpus. These 67 linguistic traits are classified

by their syntactic class and split into sixteen primary syntactic categories:

Table 1: Classification of 67 linguistic features into 16 main categories based on grammar and function

A. Tense and aspect markers
1. past tense
2. perfect aspect
3. present tense
B. Place and time adverbials
4. place adverbials (e.g., <u>above</u> , <u>beside</u> , <u>outdoors</u>)
5. time adverbials (e.g., <u>early</u> , <u>instantly</u> , <u>soon</u>)
C. Pronouns and pro-verbs
6. first-person pronouns
7. second-person pronouns
8. third-person personal pronouns (excluding <u>it</u>)
9. pronoun <u>it</u>
10. demonstrative pronouns (<u>that</u> , <u>this</u> , <u>these</u> , <u>those</u> as pronouns)
11. indefinite pronouns (e.g., <u>anybody</u> , <u>nothing</u> , <u>someone</u>)
12. pro-verb <u>do</u>
D. Questions
13. direct WH- questions
E. Nominal forms
14. nominalizations (ending in <u>-tion</u> , <u>-ment</u> , <u>-ness</u> , <u>-ity</u>)
15. gerunds (participle forms functioning as nouns)
16. total other nouns
F. Passives
17. agentless passives
18. by- passives
G. Stative forms
19. <u>be</u> as a main verb
20. existential <u>there</u>
H. Subordination features
21. <u>that</u> verb complements (e.g., I said <u>that</u> he went.)
22. <u>that</u> adjective complements (e.g., I'm glad <u>that</u> you like it.)
23. WH clauses (e.g., I believed <u>what</u> he told me.)
24. infinitives
25. present participle clauses (e.g., <u>Stuffing his mouth with cookies</u>)

26. past participle clauses (e.g., Built in a single week)
27. past participle WHIZ deletion relatives (e.g., the solution produced by this process)
28. present participle WHIZ deletion relatives (e.g., the event causing this decline is...)
29. <u>that</u> relative clauses on subject position (e.g., the dog that bit me)
30. <u>that</u> relative clauses on object position (e.g., the dog that I saw)
31. WH relative on subject position (e.g., the man who likes popcorn)
32. WH relative on object position (e.g., the man who Sally likes)
33. pied-piping relative clauses (e.g., the manner in which he was told)
34. sentence relatives (e.g., Bob likes fried mangoes, which is the most disgusting thing I have ever heard of)
35. causative adverbial subordination (because)
36. concessive adverbial subordination (although, though)
37. conditional adverbial subordination ((if, unless)
38. other adverbial subordination (e.g., since, while, whereas)
I. Prepositional phrases, adjectives, and adverbs
39. total prepositional phrases
40. attributive adjectives (e.g., the big horse)
41. predicative adjective (e.g., the horse is big)
42. total adverbs
J. Lexical specificity
43. type/token ratio
44. mean word length
K. Lexical classes
45. conjuncts (e.g., however, consequently)
46. downtoners (e.g., nearly, slightly)
47. hedges (e.g., at about, something like)
48. amplifiers (e.g., perfectly, absolutely)
49. emphatics (e.g., a lot, for sure, really)
50. discourse particles (e.g., now, anyway)
51. demonstratives
L. Modals
52. possibility modals (can, may, might, could)
53. necessity modals (ought to, should, must)
54. predictive modals (will, would, shall)
M. Specialized verb classes
55. public verbs (e.g., declare, mention, say)

56. private verbs (e.g., believe, doubt, know)
57. suasive verbs (e.g., command, insist)
58. seem and appear
N. Reduced forms and dispreferred structures
59. contractions
60. subordinator that deletion (e.g., I think <u>that</u> he went)
61. stranded prepositions (e.g., the candidate that I was thinking of)
62. split infinitives (e.g., he wants to convincingly prove that...)
63. split auxiliaries (e.g., they are objectively shown to...)
O. Coordination
64. phrasal coordination (NOUN and NOUN; ADJ and ADJ; VERB and VERB; ADV and ADV)
65. independent clause coordination
P. Negation
66. synthetic negation
67. analytic negation

Biber (1988, Appendix 11, p. 223-245) proposes a thorough explanation of the language characteristics that define these categories.

The study (Asghar & Mahmood, 2018) used multidimensional analysis to examine linguistic variance in Pakistani Legal English genres. Linguistic variety was found in print advertising in Pakistani media in Pakistan (Shakir, 2013), using multidimensional analysis to register investigations that transcend English legal registers.

Research Methodology

Research Design

The current study is a corpus based study, which uses the multidimensional analysis approach (Biber, 1988) to examine the Khyber Pakhtunkhwa enacted laws by using the qualitative method research design i.e. understanding the way the frequencies work within the texts through qualitative analysis.. This study methodology enables to explore the lexico-grammatical variances among different categories of Khyber Pakhtunkhwa enacted laws. The study is exploratory.

Data Collection

The present data is gathered through a primary source in which the researcher self-collected and downloaded the data from the official website of KP code in pdf form. The nature of data collected from the website is an official legal document. Data is ethically valid because it is not a secret document. It is publicly available and is open to all.

Compilation of Corpus

For the data compilation, the researcher gathered the material from the official website of the KP code (<http://kpcode.kp.gov.pk/>). The research included KP enacted laws, the laws of fourteen different theme-based categories: University, Finance, Ad- hoc, Benefits and allowance, Court, Fund, Health, Land and property, law, loan, statutory bodies, revenue and tax, women, and repeal acts. The rationale for choosing these categories is the nature of the data. The researcher selects those acts that are equivalent in terms of the equal number of pages or quantity of words, in order to establish consistency. The current study's data-collecting tool was a corpus.

A sample corpus was prepared for this current research project, consisting of a large number of texts carefully gathered and obtained in PDF format from the KP code website, and then the corpus was created in Word document format. The data was downloaded from the KP code website and turned into plain text files because MAT only reads text files. A corpus of 70 enacted laws was collected from the official website of the KP code and analyzed using a corpus linguistics tool.

Data Analysis

For the analysis, data is tagged and analyzed by using a corpus tool called Multidimensional Analysis Tagger, or MAT (v1.3.3). The Multidimensional Analysis Tagger (MAT) of Biber is a corpus linguistic tool that tags texts automatically and classifies the features of a language. The data were analyzed using Biber's (1988) MD analysis model. It is built on 67 language characteristics and six dimensions i.e., "Involved vs. Informational Production", "Narrative vs. Non- Narrative Concerns", "Explicit vs. Situation Dependent Reference", "Overt Expression of Argumentation/Persuasion", and "Abstract vs. Non-Abstract Style" (Biber, 1988). Every dimension contains a collection of language features that may be utilized to examine a specific text. There exists a value in every dimension, both negative and positive; this indicates whether the characteristics are available or not.

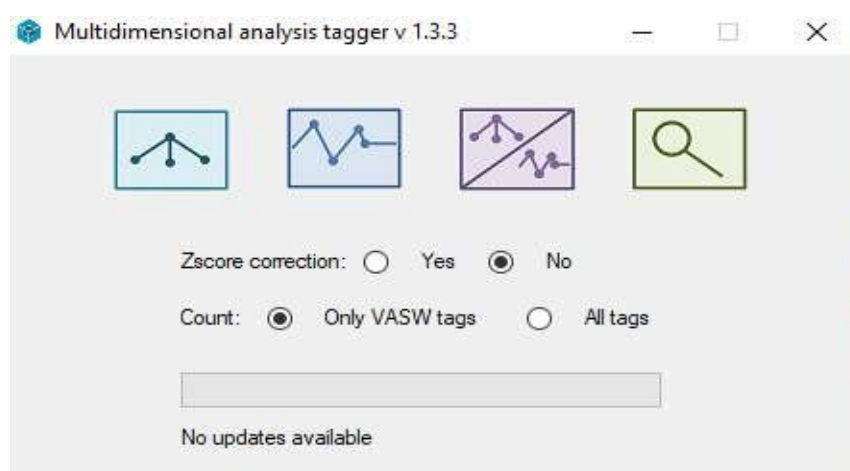


Figure 1 Multidimensional Analysis Tagger v 1.3.3

Result and Discussion

Interpretation of Dimension 1

“Informational and involved discourse” make up the first and foremost dimension, which is a continuum with positive and negative values. This dimension captures the difference between texts that are focused on the speaker or writer's own experiences and thoughts, and texts that are focused on providing information to the reader or listener.

Biber's 1993 MD model states that on Dimension 1, a text having a high frequency of “private verbs, that deletion, second-person pronouns, hedges, discourse particles, wh-questions, wh- clauses, etc.,” (traits with positive scores) indicates that involved discourse is present, which indicates that text is engaging and communicative in nature for instance, as conversation. In contrast, a text having a high frequency of nouns, prepositions, attributive adjectives, etc (features with negative scores) indicates that informational discourse is predominant, as in the case of academic prose.

Dimension 1 “Involved vs Informational Discourse”

Positive Features	Negative Features
private verbs	Nouns
that-deletions	average word length
contractions	prepositions
present tenses	type/token ratio
second person pronouns	attributive adjective
do as pro-verb	
analytic negations	
demonstrative pronouns	
emphatics	
first person pronouns	
pronoun it	
be as main verb	
causative subordinations	
discourse particles	
indefinite pronouns	
Hedges	
amplifiers	
sentence relatives	
wh questions	
possibility modals	
non-phrasal coordinations	
wh clauses	
stranded prepositions	

Table 2: Dimension 1 “Involved vs Informational Discourse”
Our corpus data's location has low scores, as indicated for dimension 1, indicating that text of Statutory bodies category is informational

Dimension 1	Mean Score of Statutory bodies Category -19.49
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Table 3: Linguistic Features of Dimension 1 of Statutory Bodies, along with percentages, mean scores, and frequencies

Factor 1

	TAG	TITLE	PERCENTAGE	SCORE	FREQUENCY
POSITIVE FEATURES OF DIMENSION 1					
1	AMP	amplifiers	0%	-1.04	N/A
2	[BEMA]	BE as main verb	0.26%	-2.71	30.3134
3	CAUS	causative subordination	0%	-0.65	N/A
4	COND	(conditional subordination)	0.09%	-0.73	8
5	[CONT]	contractions	0%	-0.73	N/A
6	DEMP	demonstrative pronouns	0.01%	-0.94	1
7	DPAR	discourse particles	0%	-0.52	N/A
8	EMPH	general emphatics	0.03%	-1.43	3
9	FPP1	first person person pronouns	0.11%	-1	10
0	HDG	general hedges	0%	-0.46	N/A
1	INPR	indefinite pronouns	0%	-0.7	N/A
2	PHC	non-phrasal coordination	0.7%	1.33	61
3	PIT	pronoun IT	0.22%	-1.14	19
4	POMD	possibility modals	0.36%	-0.63	31
5	[PRIV]	private verbs	0.47%	-1.28	54.7973
6	[PROD]	DO as pro-verb	0.08%	-0.63	9.3272
7	RB	(adverbs)	0.25%	-3.59	22
8	[SERE]	sentence relatives	0%	-0.25	N/A
9	SPP2	Second person person pronouns	0%	-0.72	N/A
0	[STPR]	final prepositions	0.11%	-0.33	12.8249
1	[THATD]	THAT deletion	0.03%	-0.68	3.4977
2	VPRT	present tense verbs	1.17%	-1.92	136.41
3	[WHCL]	WH clauses	0%	-0.6	N/A
4	[WHQU]	WH questions	0%	-0.33	N/A
5	XX0	analytic negation	0.05%	-1.31	4
NEGATIVE FEATURES OF DIMENSION 1					
6	AWL	All word length	4.52%	0.05	N/A
7	JJ	attributive adjectives	3.93%	-1.14	343
8	NN	nouns	43.8%	7.23	5106.64
9	[PASS]	(agentless passives)	0.39%	-0.86	45.4701
0	PIN	prepositions	7.53%	-1.39	647
1	PLACE	(place adverbials)	0.01%	-0.88	1
2	TTR	type/ token ratio	120%	-4.06	N/A
3	[WZPAST]	(past participle WHIZ deletions)	0.19%	-0.19	17
4	[WZPRES]	(present part. WHIZ deletions)	0.09%	-0.39	10.493

The_DT application_NN of_IN the_DT provisions_NNS of_IN this_DT Act_NN shall_MD be_VB in_IN a_DT manner_NN that_IN it_PRP shall_MD not_RB prejudice_NN the_DT use_NN of_IN the_DT national_JJ language_NN ._-.

Some of linguistic features are found in “involved and informational discourse”. With nouns, average word lengths, prepositions, type/token ratios, and attributive adjectives, the text is informative. The example shows that, at 43.8%, linguistic characteristics like nouns have the highest proportion. As stated by Biber (1988), nouns are the main means by which meaning is expressed in a text. A text with a high type/token ratio is densely packed with information since it has a large number of lexicons.

120% is the type/token ratio percentage from the provided corpus. This indicates that there is a lot of information in the text.

Interpretation of Dimension 2

The second dimension is titled "Narrative vs. Non-narrative Concerns". This dimension captures the contrast between texts that tell a story ("narrative concerns") and texts that do not tell a story ("non-narrative concerns"). Positive values signify that particular variety is associated with "narrative discourse", while negative

Dimension 2 "Narrative and Non-narrative Concerns"

Positive Features	Negative Features
past tenses	No negative features
third person pronouns	
perfect aspects	
public verbs	
synthetic negations	
present participial clauses	

values show a non-narrative focus for the text. Texts with high positive scores often use "past tense verbs, third-person pronouns, verb- perfect aspect, and public verbs. In contrast, texts with negative scores frequently use "present tense verbs, pronouns it, that deletion, and place adverbial" (Biber, 1988).

Table 4 Dimension 2 "Narrative and Non-narrative Concerns"

Our corpus data's location has low scores, as indicated for dimension 2, indicating that text of Repeal category is non-narrative.

Dimension 2	Mean Score of Repeal Category
	-5.84

No.	TAG	TITLE	PERCENTAGE	SCORE	FREQUENCY
POSITIVE FEATURES OF DIMENSION 2					
1	AWL	(word length)	5.17%	1.67	N/A
2	[PEAS]	perfect aspect verbs	0.29%	-1.1	24.424
3	[PRESP]	present participial clauses	0.03%	-0.41	N/A
4	[PUBV]	public verbs	0.17%	-1.11	14.317
5	SYNE	synthetic negation	0.03%	-0.88	2
6	TPP3	third person pronouns	0.2%	-1.24	13
7	VBD	past tense verbs	0.66%	-1.1	55.58
NEGATIVE FEATURES OF DIMENSION 2					
8	JJ	(attributive adjectives)	3.7%	-1.26	N/A
9	VPRT	(present tense verbs)	2.12%	-1.65	178.55
10	[WZPAST]	(past participle WHIZ deletions)	0.12%	-0.42	10.106

Table 5 Linguistic Features of Dimension 2 of Repeal Category, along with percentages, mean scores, and frequencies

``_`` asset_NN "_" means_VBZ anything_NN of_IN the_DT value_NN includes_VBZ but_CC is_VBZ not_RB limited_VBN to_TO property_NN whether_IN tangible_JJ or_CC intangible_JJ ,_, cash_NN ,_, investments_NNS ,_, accounts_NNS receivables_NN ,_, loans_NNS granted_VBN ,_, inventory_NN ,_, vehicles_NNS ,_, furniture_NN ,_, plant_NN and_CC machinery_NN ,_, which_WDT is_VBZ under_IN the_DT administrative_JJ control_NN of_IN the_DT Ehtesab_NNP Commission_NNP before_IN the_DT commencement_NN of_IN this_DT Act_NN

Present-tense verbs, adjectives, and the present participial form are indicators of non-narrative markers (Biber, 1988). The aim of present tense, according to Biber (1988), is to indicate current situational events. The current immediate setting is also described using adjectives, designating it as a non-narrative aspect.

Every linguistic feature found in the current corpus is displayed in a table along with its frequency and percentage. Based on the distribution of features on dimension 2, elements like past tense verbs, the perfect aspect, the past participial, and third-person pronouns indicate the existence of a narrative concern in text. With percentages of 3.7% and 2.12%, respectively, adjectives and present tense verbs features make up a large portion of the corpus. The 14 categories' language was examined using the dimensions established by dimension 2. This illustrates how the text in the repeal category is non-narrative in nature.

Interpretation of Dimension 3

This dimension captures the difference between texts that explicitly state all of the information that is necessary for the reader or listener to understand the text ("explicit reference") and texts that rely on the reader's knowledge of the situation to

understand the text (“situation-dependent reference”). On the third dimension, higher scores suggest explicit discourse, whereas lower values emphasize situation-dependent discourse. “Situation-dependent reference” features include time adverbials, general adverbs, place adverbials. Some of the explicit reference that contribute to fluent language include relative clauses with wh-words in object position, relative clauses with wh- words in subject position, nominalizations, phrasal coordination and pied-piping relatives.

Table 6 Dimension 3 “Situation-Dependent vs. Explicit Reference”

Our corpus data's location has high scores, as indicated for dimension 3, indicating that text of University category is explicitly elaborated.

Dimension 3	Mean Score of University Category
	15.45

Dimension 3 “Situation-Dependent vs. Explicit Reference”

Positive Features	Negative Features
wh relative clauses on object position	time adverbials
pied-piping relatives	place adverbials
wh relative clauses on subject position	general adverbs
phrasal coordinations	
nominalizations	

Factor 3

S. No.	TAG	TITLE	PERCENTAGE	SCORE	FREQUENCY
POSITIVE FEATURES OF DIMENSION 3					
1	NOMZ	nominalizations	7.33%	3.71	889
2	PHC	phrasal coordination	2.27%	7.15	276
3	[PIRE]	pied piping constructions	0.07%	0	9
4	[WHOBJ]	WH relative clauses on object positions	0.07%	-0.41	10.34
5	[WHSUB]	WH relative clauses on subject positions	0.12%	-0.45	17.7
NEGATIVE FEATURES OF DIMENSION 3					
6	PLACE	place adverbials	0.09%	-0.65	11
7	RB	adverbs	0.57%	-3.4	69
8	[TIME]	time adverbials	0.03%	-1.4	4

Table 7 Linguistic Features of Dimension 3 of University Category, along with percentages, mean scores, and frequencies
 WHEREAS_IN it_PRP is_VBZ expedient_JJ to_TO provide_VB for_IN the_DT establishment_NOMZ of_IN the_DT Kohat_NNP University_NOMZ of_IN Science_NNP and_PHC Technology_NNP

at_IN Kohat_NNP and_CC for_IN matters_NNS ancillary_JJ thereto_NN ;_: AND_CC WHEREAS_IN the_DT Governor_NNP of_IN 3_CD -LRB_-LRB- Khyber_NNP Pakhtunkhwa_NNP -RRB_-RRB- is_VBZ satisfied_JJ that_IN circumstances_NNS exist_VBP which_WDT render_VBP it_PRP necessary_JJ to_TO take_VB immediate_JJ action_NOMZ ;_:

NOW_RB ,_, THEREFORE_RB ,_, in_IN pursuance_NN of_IN Proclamation_NOMZ of_IN Emergency_NNP of_IN the_DT fourteenth_JJ day_NN of_IN October_NNP ,_, 1999_CD ,_, and_CC the_DT Provisional_NNP Constitution_NOMZ Order_NNP No._NN 1_CD of_IN 1999_CD ,_, as_IN amended_VBN up_RP to_TO date_NN ,_, read_VBN with_IN Article_NNP 4_CD of_IN the_DT Provisional_NNP Constitution_NOMZ -LRB_-LRB- Amendment_NOMZ -RRB_-RRB- Order_NNP No._NN 9_CD of_IN 1999_CD ,_, and_CC in_IN exercise_NN of_IN all_DT powers_NNS enabling_VBG him_PRP in_IN that_DT behalf_NN ,_, the_DT Governor_NNP of_IN the_DT 4_CD -LRB_-LRB- LRB- Khyber_NNP Pakhtunkhwa_NNP -RRB_-RRB- is_VBZ pleased_JJ to_TO make_VB and_PHC promulgate_VB the_DT following_JJ Ordinance_NNP :_: 1_LS ._.

Biber (1988) indicated that low values on this dimension indicate a strong adverbial content, whereas high values indicate a high noun content, among other things. The table above shows the frequency and proportion of each different characteristic in dimension 3. In the present corpus, nouns have higher percentages (7.33%). The way these items function indicates that the content is more informative in nature. Nouns are used in certain texts to communicate information. Another notable feature in this corpus, with a frequency of (2.27%), is phrasal coordination.

This feature makes a sentence more elaborate and instructive, separating it from context-dependent use. Because the language of the university category has numerous nouns and phrasal coordination, it is classed as context-independent in this dimension.

Dimension 4 “Overt Expression of Persuasion”

Positive Features	Negative Features
Infinitives	No negative features
prediction modals	
suasive verbs	
conditional subordinations	
necessity modals	
split auxiliaries	

Interpretation of Dimension 4

The term "overt expression of argumentation/persuasion" refers to dimension four. This dimension captures difference between texts that are designed to convince readers to take a specific action

“overt expression of persuasion”) and texts that are not designed to persuade the reader or listener (non-overt expression of persuasion). The research conducted by Biber in 1992 found that only positive weight features are present in dimension four. Argumentative discourse on this dimension's positive polarity is produced by linguistic elements such as “infinitives, split auxiliaries, prediction modals, conditional subordinations, necessity modals and suasive verbs”.

Table 8: Dimension 4 “Overt Expression of Persuasion”
Our corpus data's location has high scores, as indicated for dimension 4, indicating that text of Women category is persuasive in nature.

Dimension 4	Mean Score of Women Category
	1.26

Factor 4

Table 9: Linguistic Features of Dimension 4 of Women Category, along with percentages, mean scores, and frequencies

S. No.	TAG	TITLE	PERCENTAGE	SCORE	FREQUENCY
POSITIVE FEATURES OF DIMENSION 4					
		conditional subordination	0.37%	0.55	39
1	COND				
2	NEMD	necessity modals	0.05%	-0.76	5
3	POMD	(possibility modals)	0.99%	1.17	126.8
4	PRMD	prediction modals	1.51%	2.26	193.4
5	[SPAU]	split auxiliaries	0.19%	-1.44	N/A
	[SPIN]	infinitives	0.01%	1000	1
6	[SUAV]	suasive verbs	0.59%	0.97	75.5
No Negative Features					

The_DT Committee_NNP shall_MD consist_VB of_IN three_CD members_NNS of_IN whom_WP at_IN least_JJS one_CD member_NN shall_PRMD be_VB a_DT woman_NN ._. One_CD member_NN shall_PRMD be_VB from_IN senior_JJ management_NN and_CC one_CD shall_PRMD be_VB a_DT senior_JJ representative_NN of_IN the_DT employees_NNS or_CC a_DT senior_JJ employee_NN where_WRB there_EX is_VBZ no_DT CBA_NNP ._.

One_CD or_CC more_JJR members_NNS can_POMD be_VB co-opted_VBN from_IN outside_IN the_DT organization_NN if_IN the_DT organization_NN is_VBZ unable_JJ to_TO designate_VB three_CD members_NNS from_IN within_IN as_IN described_VBN above_IN ._. A_DT Chairperson_NNP shall_PRMD be_VB designated_VBN from_IN amongst_IN them_PRP ._.

The_DT inquiry_NN Committee_NN shall_PRMD ensure_VB [SUAV] that_IN the_DT employer_NN or_CC accused_VBN shall_PRMD in_IN no_DT case_NN create_VB any_DT hostile_JJ

environment_NN for_IN the_DT complainant_NN so_RB as_IN to_TO
 pressurize_VB her_PRP\$ from_IN freely_RB pursuing_VBG
 her_PRP\$ complaint_NN ;_:

The women category (1.26) indicates that it is the most persuasive and argumentative than other categories. The linguistic feature like “infinitives, prediction modals, suasive verbs, conditional subordinations, necessity modals, and split auxiliaries” shows positive values that have high chances of argumentative discourse. The table shows that the women category has higher features of predictive modals (1.51%), possibility modals (0.99%) and suasive verbs (0.59%).

Interpretation of Dimension 5

The distinction between “Impersonal (Abstract) and Non-impersonal (non-abstract style)” is labelled as Dimension 5. This dimension captures difference between texts that convey information that is abstract, such as concepts and ideas (“abstract information”) and texts that convey non-abstract information, such as concrete objects and events (“non-abstract information”). The features of abstract information are “conjuncts, agentless passives, past participial clauses, by passives, past participial WHIZ deletion relatives, other adverbial subordinators”.

Dimension 5 “Abstract and Non-Abstract Information”	
Positive Features	Negative Features
Conjuncts	No negative features
agentless passives	
past participial clauses	
by passives	
past participial WHIZ deletion relatives	
other adverbial subordinators	

Table 10 Dimension 5 “Abstract and Non-Abstract Information”

Our corpus data's location has high scores, as indicated for dimension 5, indicating that text of Revenue category is impersonal in nature.

Dimension 5	Mean Score of Revenue Category
	3.07

Factor 5

Table 11: Linguistic Features of Dimension 5 of Revenue Category, along with percentages, mean scores, and frequencies

TAG	TITLE	PERCENTAGE	SCORE	FREQUENCY
POSITIVE FEATURES OF DIMENSION 5				
1	[BYPA] BY-passives	0.21%	1	29
2	CONJ conjuncts	0.26%	0.88	30
	other adverbial			
3	OSUB subordinators	0.17%	0.64	19
4	[PASS] agentless passives	1.45%	0.74	199.98
5	[PASTP] past participial clauses	0.11%	2.5	15.71
6	PRED (predicative adjectives)	0.48%	0.04	55
	past participial WHIZ			
7	[WZPAST] deletions	0.5%	0.81	68.96
No Negative Features				
8	TTR (type/ token ratio)	148%	-2.71	N/A

If_IN any_DT question_NN arises_VBZ whether_IN any_DT person_NN is_VBZ [PASS] compelled_VBN as_IN aforesaid_NN to_TO reside_VB within_IN the_DT limits_NNS of_IN a_DT municipality_NN or_CC is_VBZ [PASS] bound_VBN as_IN aforesaid_NN to_TO keep_VB any_DT horse_NN ,_, the_DT decision_NN thereon_NN of_IN such_JJ authority_NN as_IN the_DT 5_CD -LRB_-LRB- Federal_NNP Government_NNP -RRB_-RRB- may_MD ,_, from_IN time_NN to_TO time_NN ,_, appoint_VB in_IN this_DT behalf_NN shall_MD be_VB conclusive_JJ ...

The table above indicates the proportion, score, and frequency of specific language qualities such as predicative adjectives 0.48%, past participial WHIZ deletion 0.5%, by passive 0.21%, past participial clauses 0.11%, agentless passive 1.45%, conjuncts 0.26%, other adverbial subordinators 0.17%. When these specific components appear together in written documents, it is indicative of the author's intention to write out of objective intentions and abstract manner. Passive structures emphasize the thing acting like a referent since they organize writing. The type/token ratio of 148% is the other important characteristic of this particular dimension. The first dimension indicates that the corpus language is extremely informative and showcases a wide-ranging vocabulary.

Interpretation of Dimension 6

Dimension 6 is labelled as "Online informational elaboration". High values on this dimension suggest that time limitations were used in the production of the information conveyed. "On-line informational elaboration" exhibits traits such as "verb complements in "that" clauses, demonstratives, relative clauses in object position, and adjective complements in "that" clauses" (Biber, 1988).

Table 12 Dimension 6 “On-line Informational Elaboration”
Dimension 6 “On-line Informational Elaboration”

Positive Features	Negative Features
that clauses as verb complements	No negative features
demonstratives	
that relative clauses on object position	
that clauses as adjective complements	

Our corpus data's location has high scores, as indicated for dimension 6, indicating that text of Ad hoc category is generated under specific time limitation.

Dimension 6	Mean Score of Ad hoc Category
	1.14

Factor 6

	TAG	TITLE	PERCENTAGE	SCORE	FREQUENCY
POSITIVE FEATURES OF DIMENSION 6					
1	DEMO	Demonstratives	1.93	2.24	204
2	DEMP	(Demonstrative pronoun)	0.06	-0.83	6
3	EX	(Existential THERE)	0.03	-1.06	3
4	[STPR]	(Stranded/Final prepositions)	0	-0.74	N/A
5	THAC	THAT clauses as adj. compliments	0	-0.5	N/A
6	THVC	THAT clause as verb compliments	0.01	-1.1	1
7	TOBJ	THAT relative clauses on object positions	0	-0.73	N/A
8	[WHOBJ]	(WH relative clauses on object position)	0.02	-0.71	2
NEGATIVE FEATURES OF DIMENSION 6					
9	PHC	Phrasal coordination	1.19	3.15	126

Table 13 Linguistic Features of Dimension 6 of Ad hoc Category, along with percentages, mean scores, and frequencies

Table reflects that ad hoc category has high frequency of demonstratives features as compared to other features.

Conclusion

The textual dimension inquiry was resolved by utilising Biber's multidimensional analysis tagger. The purpose of this corpus tool is to supply the required statistical data for the designated textual dimension and to grammatically annotate the data. This dimension divides the data in half and groups the data into six dimensions,

each of which indicates whether a certain linguistic trait is present or absent. The frequency of each unique linguistic element used by the author of the passed legislation is shown by dimensions. These groups usually employ the following in their prospectuses: nouns, verbs, adverbial adjectives, adjectives, present tense, verbs, adverbs, infinitives, and demonstratives. These linguistic characteristics are common and act as distinguishing elements that set this writing style apart. Dimensions give the frequency of each unique linguistic features used in enacted laws. Nouns, verbs, adverbial adjectives, passive construction, adjectives, present tense, verbs, adverbs, infinitives, and demonstratives are commonly used in these categories of enacted legislation. These linguistic characteristics are common and act as distinguishing elements that set this writing style apart.

Table 14: Common Occurring Linguistic Features in Biber’s Six Dimensions

s.no.	TAG	Linguistic Features	Percentage	Frequency
1	NN	Nouns	43.80%	5106.4
2	JJ	Attributive adjectives	3.93%	343
3	NOMZ	nominalizations	7.33%	889
4	PHC	phrasal coordination	2.27%	276
5	VPRT	present tense verbs	2.12%	178.55
6	[PASS]	agentless passives	1.45%	199.98
7	PRMD	prediction modals	1.51%	193.41
8	POMD	possibility modals	0.99%	126.8
9	PRED	predicative adjectives	0.48%	55
10	CONJ	conjuncts	0.26%	30

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