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Interdisciplinary Themes of
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Language Learning, Technology, and Identity
in the Age of AI and Globalization

*Edited by Xiaoming Jiang
and Muhammad Azeem Ashraf*



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Edited by Xiaoming Jiang and Muhammad Azeem Ashraf

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Meet the editors



Xiaoming Jiang is a professor from the Institute of Linguistics and the Key Laboratory of Language Science and Multilingual Artificial Intelligence at Shanghai International Studies University, China. He obtained a BS in Psychology from East China Normal University and a PhD in Cognitive Neuroscience from Peking University. He worked as a research fellow at the School of Communication Sciences and Disorders, McGill University, Canada, and as a senior speech scientist in Nuance Communication. His research combines experimental methodologies and computational approaches to uncover human communicative processes' social, psychological, neural and pathological aspects. Dr. Jiang published nearly sixty peer-reviewed articles in high-impact journals such as *Trends in Cognitive Sciences* and *Behavioral Research Methods*.



Muhammad Azeem Ashraf is an Associate Professor at the Institute of Education at Hunan University in China. He holds a PhD in Comparative Education (Educational Leadership and Policy) from Beijing Normal University. His research focuses on comparative education, innovative teaching methodologies, language and social issues in education, STEM education, and the role of technology in education. Dr. Ashraf has led several funded research projects and has published extensively in international peer-reviewed journals and books. He also serves as a member of the editorial board for several journals.

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Preface

This edited volume, *Interdisciplinary Themes of Sociolinguistic Studies: Language Learning, Technology, and Identity in the Age of AI and Globalization*, brings together a diverse collection of research that explores the dynamic interplay between language, society, and technology. The chapters in this book address critical issues in sociolinguistics, ranging from language learning and teaching challenges to the impact of emerging technologies like artificial intelligence (AI) on language use and identity formation. By examining these themes through interdisciplinary lenses, this volume contributes to a deeper understanding of how language shapes and is shaped by our rapidly changing world.

The book is organized into four sections, each focusing on a distinct yet interconnected theme. **Section 1: Language Learning, Teaching, and Multilingual Challenges** opens with a study by Tahira Yasmeen, Jan Alam, and Muhammad Azeem Ashraf, who investigate the language-related challenges faced by Islamic education students in English-medium instruction at higher education institutions in Pakistan. This is followed by Herianti Herianti and Yusak Hudiyono's exploration of second language acquisition among lecturers in Samarinda, Indonesia, through the lens of the Affective Filter Hypothesis. The section concludes with Chuan Gao and Hui-Zhong Shen's examination of how English language learners' behaviors evolve in a Virtual Community of Practice (VCoP), shedding light on the role of online knowledge construction in language learning.

Section 2: Language Perceptions, Ideologies, and Identity shifts the focus to the sociocultural dimensions of language. Marco Bagni opens this section with a study on students' perceptions of English and English as a Lingua Franca (ELF), highlighting the ideological and functional roles of English in global contexts. James N. Tasah then explores the prospects of Fulfulde as a regional language in Cameroon, emphasizing the challenges and opportunities for minority languages in socioculturally heterogeneous regions. The section concludes with Mario Vassallo and Lydia A. Sciriha's analysis of expressions of 'liminality' among post-COVID-19 visitors to Lourdes, offering a unique perspective on how language and identity intersect in times of crisis.

Section 3: Discourse Analysis and Genre Studies in Academic Contexts delves into the structural and functional aspects of language in academic settings. Xianqing Luo begins with a genre-based study of disciplinary rhetorical structures in research articles, providing insights into how academic writing varies across disciplines. Silvana Silva and Joicyane Carolaine Santos then present a historical-linguistical and social analysis of Brazilian research on rewriting in high school education, tracing its evolution over two decades. The section concludes with Cemile Uzun's investigation into using artificial intelligence in producing academic texts, raising important questions about authorship and authenticity in the digital age.

Section 4: Pragmatics, Technology, and Social Cognition examines the intersection of language, technology, and cognition. Franziska E. Viertel opens this section with an evaluation of methods for testing early social cognition from a pragmatic perspective, offering a critical assessment of current approaches. Mansye Sekewael and Karolis Anaktototy then explore the role of Chat-GPT in fostering growth in English writing abilities among students, highlighting the potential of AI-driven tools in language education.

This volume would not have been possible without the contributions of the authors, whose diverse perspectives and rich research methodologies have enriched its pages. I would also like to extend my gratitude to the reviewers and editorial team for their invaluable feedback and support throughout the publication process. Special thanks go to Elvira Baumgartner for her dedication and assistance in bringing this project to fruition and Mirena Calmic for her role in facilitating the merging of two promising book projects into one cohesive and exciting endeavor.

As the Academic Editor of this volume, I am deeply grateful for the opportunity to collaborate with such a talented group of scholars, and especially with the co-editor, Professor Muhammad Azeem Ashraf, whose inspired vision and exceptional efforts in editing the chapters related to “Global Trends in Second Language Learning” have been pivotal to this project. I hope this book will serve as a valuable resource for researchers, educators, and students interested in the interdisciplinary study of language, society, and technology.

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Section 1

Language Learning, Teaching,
and Multilingual Challenges

Chapter 1

Islamic Education Students' Language-Related Challenges in English Medium Instruction at Higher Education Institutions in Pakistan

Tahira Yasmeen, Jan Alam and Muhammad Azeem Ashraf

Abstract

This study explores Islamic studies students' challenges in learning English as a Second Language (ESL) in Pakistan's higher education context. The primary objective is to explore language proficiency, instructional support, psychological and emotional challenges, and environmental and social challenges these students encounter. A descriptive quantitative research design was employed, utilizing a structured questionnaire to collect the data from 132 students. The data were analyzed to examine the main challenges and differences based on gender, academic level, or years. The findings reveal the presence of significant challenges across all four areas. However, no significant differences were observed between male and female students, undergraduate and postgraduate students, or across different years of study. These results emphasize the need for tailored instructional strategies and support mechanisms to address the specific needs of Islamic studies students in ESL learning environments. It contributes to the broader understanding of ESL education in Islamic contexts and offers practical recommendations for enhancing educational practices and policies.

Keywords: English language, Islamic studies, language proficiency, instructional support, ESL challenges

1. Introduction

In Pakistan, people are generally bilingual or multilingual in speaking their native languages along with the national and official languages Urdu and English. The education and language policies of the state prioritize Urdu and English, often neglecting indigenous languages [1]. Two parallel education systems operate in Pakistan: government institutes and private institutes. In the former, the medium of instruction is Urdu, while teaching English and the native language is compulsory starting in the

6th grade [2]. Conversely, English and Urdu are the sole languages of instruction in private institutes, and local languages are not taught at all [3]. However, after middle school, the language of instruction shifts abruptly to English in higher secondary schools. In a country like Pakistan, where English is an essential requirement for higher education and a criterion for job eligibility, the lack of proficiency in English affects the educational and professional careers of many educated in government institutes [4, 5].

Similar challenges regarding student enrollment are observed at Pakistan's universities [1], as most learners in universities come from government institutes and often lack proficiency in English, which creates severe challenges in learning English as a second language (ESL) [6]. Jadoon et al. [7] identify several factors contributing to these difficulties, including learners' incompetence in English, inadequate facilities, overcrowded classes, reliance on the first language, lack of parental involvement, traditional teaching methods, and the differences in script, grammar, and phonetic systems between English and the learners' first languages. It is important to note that English belongs to the Indo-European language family, whereas the local languages of Pakistan belong to the Indo-Aryan language group [5]. This study explores and identifies students' various challenges in learning ESL within the Islamic Education department.

English language proficiency is vital in today's globalized world, enabling individuals to access better educational and employment opportunities. English is the primary language of instruction in many prestigious universities worldwide [8]. Individuals proficient in English can enroll in academic programs, courses, and research endeavors offered by renowned institutions. English proficiency is often a requirement for admission to universities in English-speaking countries, such as the United States, the United Kingdom, Canada, and Australia [9]. However, students studying at boarding Islamic institutes face unique challenges in acquiring English language skills due to the specific context and environment in which they learn [10, 11]. This research aims to analyze students' difficulties in learning English skills at boarding Islamic institutes, focusing on understanding the underlying factors that contribute to these challenges [12]. To master a new language, students need to improve their speaking, listening, reading, and writing abilities, which require a strong command of the English language. Access to scientific and technological information is facilitated, and students can better engage with peers worldwide [13]. Learning difficulties are one of the challenges that students encounter, characterized by obstacles that must be addressed to achieve the desired outcome. The teaching and learning process can be hindered by various barriers, some of which are psychological, social, or physiological in nature [14].

The study's objectives are designed to explore and address the challenges faced by students in English instruction within Islamic education departments. The specific aims are:

1. To investigate the challenges to Islamic education students concerning language proficiency, instructional support, psychological and emotional, and environmental and social context in learning ESL.
2. To explore differences in Islamic education students' views based on demographic factors such as gender, academic level, and educational background concerning the challenges in learning ESL.

1.1 Global importance and challenges in English language learning

English has become a global lingua franca, greatly influencing educational and professional opportunities worldwide. Many prestigious institutions, especially in English-speaking countries like the United States, the United Kingdom, Canada, and Australia, require English proficiency for admission and academic success [15]. The increasing adoption of English as a Medium of Instruction (EMI) is driven by institutions seeking to enhance their international reputation, attract international students, and stay competitive in a global market [16]. This trend underscores the importance of adequate English language instruction to equip students for academic and professional success on a global scale.

Students in religious education departments encounter unique challenges in learning English, influenced by their specific educational contexts. Non-native English speakers often encounter significant language barriers that hinder their comprehension and academic performance. Chaerunnisa [17] emphasizes adequate language support to help students overcome these barriers, including difficulties understanding lectures, reading materials, and completing assignments. The quality of English instruction and the availability of qualified educators are critical to students' success. Mosha [18] notes that a lack of trained teachers can result in gaps in instruction, affecting students' ability to engage with complex English materials and achieve their academic goals. Cultural and contextual factors play a crucial role in language learning challenges. Ntelo [19] highlights how cultural differences and contextual variations can impact students' learning experiences, especially in environments where cultural and religious contexts shape educational practices.

1.2 Educational strategies and interventions

Effective strategies for addressing ESL challenges include providing targeted support through language labs, tutoring, and supplementary materials, which can help students overcome language barriers [20]. In addition, it requires culturally responsive teaching strategies. Implementing culturally responsive teaching practices can enhance students' engagement and learning outcomes. This approach involves recognizing and valuing students' cultural backgrounds and integrating culturally relevant content into instruction [21]. Furthermore, investing in professional development for educators to improve their English as a Second Language skills is essential for enhancing instructional quality and addressing students' needs [18].

Classroom outcomes are often negatively impacted by various challenges that affect students' ability to learn [22]. These challenges can be broadly categorized into internal and external factors. Internal factors include physical and psychological aspects that vary from student to student, while external factors encompass influences from the school environment, family, media, and broader social context [14]. Due to these influences, individual attention from teachers becomes essential. English language learning, like other subjects, is fraught with challenges, especially when teachers are not adequately trained or experienced in teaching English [23]. According to IDEH [24], the shortage of qualified English teachers forces some educators to teach a language they are not proficient in, resulting in them skipping more complex curriculum content.

Additionally, inadequate classroom resources such as books, modules, visuals, and worksheets exacerbate learning difficulties. The physical environment of classrooms, often marked by dirt, dust, peeling paint, roof leaks, and broken windows, can significantly hinder teaching and learning. Moreover, the limited use of English outside the classroom, particularly at home, presents another challenge. Many students lack the vocabulary and confidence to practice English due to their parents' limited education or unfamiliarity with the language. These issues underscore the need for strategies to address learning difficulties, improve educational outcomes, and enhance English language proficiency. This research aims to identify and address the specific learning difficulties faced by students in Boarding Islamic Institutes to support their academic success.

1.3 Theoretical perspectives on language learning

Theoretical frameworks offer valuable insights into the language learning process. Crowley and Hawhee [25] argue that language is essential for effective communication, enabling individuals to express their thoughts, emotions, and knowledge. This theory underscores the importance of language proficiency for meaningful academic and social interactions. Krashen [26] suggests that language acquisition occurs when learners are exposed to language input beyond their current proficiency level. This theory highlights the necessity of providing students with comprehensible input and opportunities for practice. Vygotsky's Sociocultural Theory posits that language learning is influenced by social interactions and cultural contexts [27]. This perspective emphasizes the role of social and cultural factors in influencing language learning experiences.

1.4 Methodology

This study employs a descriptive research design utilizing a quantitative approach to investigate the challenges faced by students studying Islamic Education in English-medium instruction within the Department at the Institute of Education and Research (IER), University of the Punjab, Lahore. The quantitative approach facilitates the collection of numerical data that can be statistically analyzed to identify patterns and relationships [28].

1.5 Population and data collection

The population for this study consists of students from the Islamic Education Department at IER University of the Punjab, Lahore. A sample of 132 students was selected randomly from various semesters to ensure a representative distribution. The sample includes male and female students from diverse socio-economic and educational backgrounds.

Data were collected through a meticulously developed and structured questionnaire to capture the nuanced insights into the students' experiences and challenges with ESL instruction. The self-developed questionnaire included items related to language barriers, instructional methods, and cultural factors. The use of a questionnaire allows for efficient data collection from a large number of respondents and supports quantitative analysis. Statistical analysis allows for a clear distinction between factual data and subjective opinions, enhancing the reliability and validity of the findings [29].

1.6 Data analysis

The collected data were analyzed using statistical methods to identify common challenges and patterns. Descriptive statistics, such as frequencies and percentages, were used/employed to summarize the demographic information. Additionally, mean and standard deviations were applied to find the level of the challenges in ESL. Furthermore, Ona Way ANOVA and Welch t-tests were used to find/examine differences in students' views based on gender and years of learning in ESL. Descriptive statistics such as means and standard deviations are used to summarize the data. At the same time, Welch's t-test and ANOVA are employed to identify significant differences in students' perceptions based on gender, academic level, and years of ESL study. The results provide a clear overview of the considerable challenges in language proficiency, instructional support, and psychological and environmental factors. These findings will serve as a basis for further discussion in the subsequent chapter.

2. Findings and discussion

The collected data were analyzed to investigate the challenges Islamic students face in learning ESL in Pakistan. The results provide a clear overview of the considerable challenges in language proficiency, instructional support, and psychological and environmental factors. These findings and discussion serve as a basis for this chapter.

Table 1 highlights the participants' demographic information indicating gender, academic level, and years of studying English. The total number of participants is 132, male = 34 (25.8%) and female = 98 (74.2%). At the academic level, BS = 119 (90.2%), MS/MPhil. = 13 (9.8%). In years of studying English, > 1 Year = 24 (18.2%), 1–3 Years = 28 (21.2%), 4–6 Years = 14 (10.6%), and < 6 Years = 66 (50%).

Gender	Frequency	Percent
Male	34	25.8
Female	98	74.2
Total	132	100.0
Academic level		
BS	119	90.2
MS/M.Phil	13	9.8
Years of studying English		
>1 Year	24	18.2
1–3 Years	28	21.2
4–6 Years	14	10.6
<6 Years	66	50.0
Total	132	100.0

Table 1.
 Demographic information.

Descriptive statistics in **Table 2** provide the results of challenges students faced while learning ESL. Students faced significant difficulties related to their language proficiency, which aligns with Rahman’s [6] findings, emphasizing the multifaceted challenges students encounter when learning in an English-medium context. These challenges highlight the gap between students’ language skills and the demands of academic content, underscoring the need for targeted linguistic support. In terms of instructional support challenges, the results show the prevalence of such challenges, with mean scores and standard deviations indicating a lack of sufficient pedagogical support. This finding is consistent with Bhowmik and Kim’s [30] research, which identifies teaching methodologies and resources inadequacies as significant barriers to effective English learning. These instructional gaps hinder comprehension and exacerbate students’ struggles in adapting to an English-medium curriculum.

Similarly, students also faced psychological and emotional challenges. The data suggest that students face considerable stress and anxiety while learning English, which aligns with Dewaele’s [31] study on the emotional dimensions of language

Indicators	Number	Minimum	Maximum	Mean	Std. deviation
Language proficiency challenges					
LPC1	132	3.00	5.00	4.1591	0.83647
LPC2	132	3.00	5.00	3.9924	0.71512
LPC3	132	3.00	5.00	4.0303	0.75097
LPC4	132	3.00	5.00	4.0303	0.71983
LPC5	132	3.00	5.00	4.3712	0.77563
Instructional support challenges					
ISC1	132	3.00	5.00	4.2348	0.80892
ISC2	132	3.00	5.00	4.0985	0.75016
ISC3	132	3.00	5.00	3.9924	0.81490
ISC4	132	3.00	5.00	3.9167	0.76210
Psychological and emotional challenges					
PEC1	132	3.00	5.00	3.9470	0.68031
PEC2	132	3.00	5.00	4.0227	0.71479
PEC3	132	3.00	5.00	4.0152	0.73084
PEC4	132	3.00	5.00	4.0682	0.72252
PEC5	132	3.00	5.00	4.1136	0.84391
Environmental and social challenges					
ESC1	132	3.00	5.00	4.0909	0.81451
ESC2	132	3.00	5.00	4.1061	0.76425
ESC3	132	3.00	5.00	4.0985	0.80892
ESC4	132	3.00	5.00	4.0000	0.79117
ESC5	132	3.00	5.00	4.0985	0.77025

Table 2.
Descriptive statistics.

learning. These challenges emphasize the psychological toll of academic pressures and the importance of fostering a supportive learning environment to enhance students' well-being and performance. Students also faced several environmental and social challenges, consistent with Hurlbert's [32] findings on the influence of environmental factors on English learning. Cultural differences, limited social interaction in English, and insufficient exposure to the language contribute to these challenges, highlighting the need for comprehensive strategies to improve students' linguistic immersion and social integration. This interconnected analysis of findings and literature emphasizes the multifaceted nature of the challenges faced by Islamic studies students, demonstrating the urgent need for targeted interventions that address language proficiency, instructional support, emotional resilience, and environmental factors cohesively.

Tables 3–5 reveal no significant differences between male and female students' responses regarding these challenges. This aligns with Baecher et al.'s [33] findings, highlighting the persistence of instructional and linguistic barriers in English as a Second Language (ESL) learning environments. The lack of gender-based differences suggests that these challenges are universally experienced among Islamic studies students, pointing to systemic issues in language instruction and support mechanisms. The results show no significant gender-based differences in students' experiences of psychological and emotional challenges related to instructional support. These findings reinforce the idea that both male and female students encounter comparable levels of stress and anxiety due to inadequate pedagogical strategies and resources. Such parity underscores the necessity for universal instructional reforms to reduce psychological burdens and promote equitable learning experiences. The analysis reveals no significant gender differences in students' perceptions of environmental and social challenges. This consistency across genders suggests that environmental and social factors—such as cultural adjustments, language immersion, and peer interactions—affect all students similarly. These findings align with broader research, including studies by Hurlbert [32], emphasizing the pervasive nature of environmental obstacles in language acquisition. The integration of these results with existing

Descriptive		N	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum
						Lower Bound	Upper Bound		
LPC	Male	34	4.0588	0.37345	0.06405	3.9285	4.1891	3.40	4.80
	Female	98	4.1367	0.48192	0.04868	4.0401	4.2334	3.00	5.00
ISC	Male	34	4.0735	0.49440	0.08479	3.9010	4.2460	3.00	5.00
	Female	98	4.0561	0.53067	0.05361	3.9497	4.1625	3.00	5.00
PEC	Male	34	4.0294	0.42678	0.07319	3.8805	4.1783	3.00	4.80
	Female	98	4.0347	0.44400	0.04485	3.9457	4.1237	3.00	5.00
ESC	Male	34	4.0824	0.50240	0.08616	3.9071	4.2576	3.00	5.00
	Female	98	4.0776	0.46274	0.04674	3.9848	4.1703	3.00	5.00

Table 3.
 Descriptive statistics about male and female data (Welch t-test).

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
LPC	Between groups	0.153	1	0.153	0.734	0.393
	Within groups	27.13	130	0.209		
	Total	27.283	131			
ISC	Between groups	0.008	1	0.008	0.028	0.867
	Within groups	35.383	130	0.272		
	Total	35.39	131			
PEC	Between groups	0.001	1	0.001	0.004	0.952
	Within groups	25.133	130	0.193		
	Total	25.133	131			
ESC	Between groups	0.001	1	0.001	0.003	0.959
	Within groups	29.1	130	0.224		
	Total	29.101	131			

Table 4.
ANOVA statistics for male female.

Robust tests of equality of means					
		Statistic ^a	df1	df2	Sig.
LPC	Welch	0.938	1	73.769	0.336
ISC	Welch	0.030	1	61.321	0.863
PEC	Welch	0.004	1	59.578	0.951
ESC	Welch	0.002	1	53.702	0.961

a. Asymptotically F distributed.

Table 5.
Robust test for male and female (Welch).

literature underscores the need for holistic strategies to address language proficiency, instructional support, and environmental challenges. By identifying the commonality of these issues across gender, the study advocates for inclusive interventions that cater to the diverse needs of all students while fostering a supportive and effective learning environment.

Descriptive statistics from **Table 6** indicate no significant differences between BS and MS students in their perceptions of language proficiency challenges. Similarly, **Table 7** reinforces these findings, highlighting consistent perceptions between BS and MS students. These results align with studies such as Rahman [6], which emphasize the systemic nature of language proficiency challenges that transcend academic levels. The data suggest that students at both undergraduate and postgraduate levels experience similar difficulties in acquiring and using English effectively in their academic contexts.

As highlighted in **Tables 6** and **7**, there are no significant differences between BS and MS students' perspectives on instructional support. Furthermore, no significant discrepancies are observed in their experiences of psychological and emotional

Descriptives	N	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum
					Lower bound	Upper bound		
LPC	119	4.0924	0.45233	0.04147	4.0103	4.1745	3.00	5.00
MS/M.Phil	13	4.3385	0.45007	0.12483	4.0665	4.6104	3.80	5.00
ISC	119	4.0420	0.52006	0.04767	3.9476	4.1364	3.00	5.00
MS/M.Phil	13	4.2308	0.50478	0.14000	3.9257	4.5358	3.50	5.00
PEC	119	4.0218	0.43397	0.03978	3.9431	4.1006	3.00	5.00
MS/M.Phil	13	4.1385	0.47878	0.13279	3.8491	4.4278	3.60	5.00
ESC	119	4.0639	0.46427	0.04256	3.9796	4.1481	3.00	5.00
MS/M.Phil	13	4.2154	0.53205	0.14756	3.8939	4.5369	3.60	5.00

Table 6.
 Descriptive statistics for level of studies.

ANOVA						
		Sum of squares	df	Mean square	F	Sig.
LPC	Between groups	0.709	1	0.709	3.470	0.065
	Within groups	26.574	130	0.204		
	Total	27.283	131			
ISC	Between groups	0.418	1	0.418	1.552	0.215
	Within groups	34.973	130	0.269		
	Total	35.390	131			
PEC	Between groups	0.159	1	0.159	0.830	0.364
	Within groups	24.974	130	0.192		
	Total	25.133	131			
ESC	Between groups	0.269	1	0.269	1.213	0.273
	Within groups	28.832	130	0.222		
	Total	29.101	131			

Table 7.
ANOVA for differences on the bases of level of studies.

challenges. These findings resonate with Bhowmik and Kim’s [30] research, which underscores the universal nature of pedagogical hurdles and emotional stress in English learning, irrespective of students’ academic levels. This uniformity indicates a shared need for improved instructional strategies and emotional support systems across educational tiers. The results show no significant differences in the views of BS and MS students regarding these above challenges, which aligns with Hurlbert’s [32] findings that highlight the widespread impact of environmental and social factors on language learning. The lack of variation suggests that peer dynamics, cultural adjustments, and access to supportive resources affect students equally, regardless of their academic standing. These findings highlight the pervasive nature of language, instructional, and environmental challenges, cutting across academic levels. By linking the results to existing literature, the study advocates for comprehensive, level-agnostic interventions that address these shared challenges to create equitable and effective learning environments for all students.

Descriptive statistics from **Tables 8** and **9** show no significant difference in the respondents’ views regarding these challenges based on the number of years of study. This finding aligns with Aziz and Kashinathan [34], who emphasize the centrality of language proficiency issues in students’ Islamic education experiences. The instructional support reveals no significant differences across years of study. Regardless of whether students have studied English for less than 1 year or more than 6 years, their views on instructional support remain consistent, as supported by Baecher et al.’s [33] findings on the persistent nature of instructional challenges in ESL contexts. The third variable, environmental and social challenges, similarly shows no significant differences across years of study in **Tables 8** and **9**, indicating that these challenges are consistently experienced by Islamic studies students throughout their academic journey.

In summary, the findings indicate that while students in Islamic education departments face various challenges in ESL instruction, demographic factors such as gender and academic level do not significantly influence their perceptions of these

Descriptives	N	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum
					Lower Bound	Upper Bound		
LPC								
Less than 1 year	24	4.0250	0.39259	0.08014	3.8592	4.1908	3.40	4.60
1-3 Years	28	4.1643	0.40753	0.07702	4.0063	4.3223	3.20	5.00
4-6 years	14	3.9857	0.30849	0.08245	3.8076	4.1638	3.60	4.60
More than 6 years	66	4.1576	0.51741	0.06369	4.0304	4.2848	3.00	5.00
ISC								
Less than 1 year	24	3.9896	0.40027	0.08170	3.8206	4.1586	3.25	5.00
1-3 years	28	4.0893	0.55783	0.10542	3.8730	4.3056	3.25	5.00
4-6 years	14	3.9821	0.39788	0.10634	3.7524	4.2119	3.25	4.75
More than 6 years	66	4.0909	0.56778	0.06989	3.9513	4.2305	3.00	5.00
PEC								
Less than 1 year	24	3.9833	0.36792	0.07510	3.8280	4.1387	3.20	5.00
1-3 years	28	3.9429	0.43156	0.08156	3.7755	4.1102	3.00	4.80
4-6 years	14	3.9143	0.32071	0.08571	3.7291	4.0995	3.40	4.60
More than 6 years	66	4.1152	0.47596	0.05859	3.9981	4.2322	3.00	5.00
ESC								
Less than 1 year	24	4.1333	0.42801	0.08737	3.9526	4.3141	3.00	4.80
1-3 years	28	3.9786	0.45327	0.08566	3.8028	4.1543	3.00	5.00
4-6 years	14	3.9143	0.33936	0.09070	3.7183	4.1102	3.20	4.60
More than 6 years	66	4.1364	0.50979	0.06275	4.0110	4.2617	3.00	5.00

Table 8.
 Descriptive for the years of studying.

ANOVA		Sum of squares	df	Mean square	F	Sig.
LPC	Between groups	0.616	3	0.205	0.985	0.402
	Within groups	26.668	128	0.208		
	Total	27.283	131			
ISC	Between groups	0.291	3	0.097	0.354	0.787
	Within groups	35.099	128	0.274		
	Total	35.390	131			
PEC	Between groups	0.929	3	0.310	1.638	0.184
	Within groups	24.204	128	0.189		
	Total	25.133	131			
ESC	Between groups	0.950	3	0.317	1.440	0.234
	Within groups	28.150	128	0.220		
	Total	29.101	131			

Table 9.
ANOVA for differences on the bases of years of studies.

challenges. Despite the noted challenges, the overall high means and low standard deviations across the variables suggest that participants generally perceive their language proficiency and support as adequate. The lack of significant differences based on gender and years of study indicates a uniformity in experiences among participants, highlighting the need for targeted interventions that address the specific challenges of ESL learning in this context. Further research could explore additional factors influencing ESL learning and the effectiveness of different instructional strategies to enhance language proficiency.

3. Conclusion

This study comprehensively analyzes the challenges Islamic studies students face in the English medium of instruction in Pakistan through a detailed examination of four critical variables: language proficiency challenges, instructional support challenges, psychological and emotional challenges, and environmental and social challenges. The research highlights the multifaceted difficulties these students encounter in their educational journey. The findings indicate that students face significant challenges related to language proficiency, instructional support, and environmental and social challenges. Notably, the analysis reveals no significant differences in perceptions of challenges among male and female students, nor between undergraduate and graduate levels, or across varying years of study, suggesting a pervasive nature of these challenges transcending demographic factors.

This research underscores the urgent need for targeted interventions to address the identified challenges in learning in English medium of instruction for Islamic studies students. By recognizing that these difficulties are prevalent across various demographic groups, educators and policymakers can better tailor their approaches to enhance the effectiveness of instruction in English. Future research should explore

strategies to mitigate these challenges, paving the way for improved educational outcomes in Islamic education.

The study has several recommendations for institutions, teachers, and students. First, the institutions should consider the background of students enrolled in the Islamic studies programs, and the curriculum material should be adjusted by considering students' language abilities. In addition, Islamic teaching institutions should also encourage students to learn English and provide the desired resources. Second, teachers should adjust their teaching plans and strategies according to students' English language learning abilities. Third, students should spend more effort improving their English language proficiency. Fourth, the study also recommends that policymakers make more policy frameworks to support English language learning for students studying in Islamic teaching institutions so that they face fewer language-related problems in higher education and perform better at national and international levels. More future studies on Islamic studies students' challenges from different educational settings across Pakistan by applying different methods (qualitative, quantitative, case studies, document analysis) will further help understand the actual situation and find solutions to the problems students face while learning in the English language.

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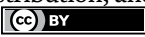
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Chapter 2

Acceleration of Second Language Acquisition of the Lecturers in Samarinda, Indonesia from Affective Filter Hypothesis

Herianti Herianti and Yusak Hudiyono

Abstract

A second language is a language acquired after the mother tongue. The large number of tribes in Indonesia and the variety of regional languages and marriages of different tribes make its citizens have different second languages. Some are both English, some are Indonesian, and some are regional languages. This is what makes the author interested in reviewing this research. The subjects of the study were two lecturers in Samarinda, Indonesia. The purpose of the study was to determine the process of acquiring second languages from different tribes. This research was conducted using an in-depth interview offline method using a recording device conducted in 2021 when the pandemic was still spreading. The data were analyzed using the affective filter hypothesis. Based on the results of this study, Samarinda lecturers obtained a second language due to internal and external factors at an early age and education at school. Second languages are also spoken in the workplace in Samarinda, Indonesia.

Keywords: second language, affective filter hypothesis, teaching, learning, culture

1. Introduction

Language acquisition is a problem because it is difficult to understand for speakers who are not used to it. Language acquisition basically occurs because in the environment that uses the language itself in communicating, both internal factors caused do not want to be different and external which is usually because they have to use the language or do not want to be punished [1]. The second language (L2) is acquired after the mother tongue (L1) or called the first language. The first language can be mastered by speakers naturally without a formal educational learning process because it is used or listened to in a family environment such as communication between mother and child which is often together with the speaker. In contrast to second language acquisition, some people find it difficult to understand if they are not required or not in a formal educational environment, unless the speaker moves

to live in an environment that uses a different colloquial language from the speaker's first language. But even though a second language is acquired in a new environment, speakers usually find it difficult in written communication if it is not acquired in a formal environment. So a second language is indeed important to be taught in formal education or school.

The second language in Indonesia is the majority of Indonesian for Indonesian citizens because of the many tribes that have regional languages or local languages in each region which are the cultural heritage of the ancestors that need to be preserved, so that Indonesian be used as a unifying language of the Indonesian nation if communicating with people of different ethnicities. East Kalimantan Province, especially in the city of Samarinda, has residents from various tribes, namely Javanese, Bugis, Butonese, Dayak, Kutai, Banjar, and others. This is what citizens must understand Indonesian. Regional languages are only spoken by fellow tribes who understand the language in which they were born and raised. In addition, there are also those who are citizens from foreign countries who control Indonesian because schools in Indonesia and their environment are also places to learn to communicate using Indonesian.

Researchers are interested in this study because language is a communication tool that is certainly not only used in the family and community environment, but language is also used in the work environment. Moreover, in Indonesia there are many different tribes with different regional languages even Indonesia also has residents who come from other countries so it is very necessary to master national and international languages to facilitate oral and written communication.

A second language is a language that is acquired intentionally and consciously if it is to be mastered by speakers. A second language is often acquired during formal primary education at the age of about 5–7 years through learning to write and read [2]. In addition, speakers mastering a second language are influenced by certain environmental factors that make speakers feel embarrassed if they use a different language, especially speakers in locations where no one uses their first language at all so that it becomes a habit for learners. Another reason for mastering a second language is because the language is recommended to be used in the environment and even afraid of being sanctioned or applying a fine system when using language that is not in accordance with what is expected by the teacher.

Several previous studies related to second language acquisition have been carried out by several researchers such as a study conducted by Ying Wang, which showed that the results of his research showed that respondents did not want to use their second language, namely English even though they majored in English because they felt they were Chinese, but because they also had to meet foreigners so they also needed to be proficient in English or other than Chinese which is their local language [3]. Furthermore, research on second language acquisition has also been researched by Carmen Boudreau who showed the results of her research based on respondent interview data or students were given the task of completing oral tasks using a second language, namely by speaking French, and this was done also on the basis of pleasure and anxiety so that they could communicate using a second language [4]. Second language acquisition research has also been researched by Mun Pei Ng, Norlindah Alias & Dorothy Dewitt showing that the way to internally motivate students to master Chinese as a second language is to provide new challenges so that students strive hard and learn more independently to gain a deep understanding [5].

The next research that has also been conducted by Chunpeng Zhai and Santoso Wibowo found three causes that can improve second language learning outcomes, including culture, empathy, and humor, have a positive influence on the application

of AI L2 chatbots. Integrate cross-cultural empathy in conversation, identify students in perceiving and responding to learning content, and investigate the effects of cross-cultural humor on students' language skills [6]. Research on second language acquisition has also been studied by Folkert Kuiken, which shows the results of his research are adult learners who are more complex in mastering the first language morphologically, the more difficult it is to learn a second language. Second language acquisition is influenced by internal factors such as anxiety, psychological influences such as motivation and language talent, and external factors that are due to task-related features and types of instruction, and the results of this study also show that teachers tend to focus more on comprehension and accuracy. There are differences between Dutch and Italian teachers, and the teacher's reflections are only partially related to the development of the syntactic complexity hypothesis in the SLA literature [7].

Based on the results of previous studies, researchers are interested in examining the process of second language acquisition because previous studies have not addressed internal factors such as students feeling afraid and embarrassed, and do not want to be different from their peers in communicating in a school or pesantren environment. The interviewees came from different tribes and different family backgrounds. Respondent 1 had parents whose father and mother worked as lecturers so she was schooled in pesantren as a child. Both her parents are educated, and although F is an only child, it does not discourage her from being lazy, besides, she is in a pesantren environment that has educational rules in learning. Unlike FT, has parents whose jobs are self-employed, so she still lives with her parents while studying in elementary school. Living with her parents did not make her lazy in studying, but she actively learned to see her parents' uncertain economic conditions and was in an enterprising environment. The two respondents work in the same region and university, F majoring in Islamic religious education and FT also majoring in Islamic religious education. In addition, even though they have a different second language, they often use Indonesian as a means of communication which is the national language in the work environment because of the diversity of different tribes or regional languages and also use English in the work environment as an international language, while regional languages are only used when communicating with fellow tribes and for those who understand their regional languages.

2. Research methods

This study used qualitative descriptive method [8] based on phenomenology [9]. This research is an ethnographic fieldwork research conducted within a day with in-depth interviews offline for three lecturers as resource persons [10]. Before interviewing respondents, researchers contact respondents first by telephone to ensure whether or not they are willing to be sources so that there is an agreement on time to meet directly in obtaining data.

Researchers come to the location where respondents live to get data according to the agreement. The subjects of this study were two lecturers in Samarinda. This study used a recording device to obtain credible data in the form of oral data directly to resource persons who have the same educational background, namely masters but come from different tribes and provinces even though they are in the same country in Indonesia. The technique of analyzing this research data is by listening and recording techniques from the data obtained on January 20, 2021.

3. Research results and discussion

This study was conducted with in-depth interviews using face-to-face recording devices. The results of this study are based on conversations between researchers and two respondents [11].

The results of this interview can be understood that F is a 29-year-old IAIN lecturer who comes from the city of Palembang, her father is Javanese and her mother is Minang. Based on the results of my interview that she uses Indonesian as a first language because her parents come from different tribes and English as her second language because she goes to a pesantren which requires her to use English in the pesantren environment. The process of acquiring a second language is in the pesantren environment because they are accustomed to using the language with their friends [12]. English is also studied in pesantren so the more she learns the language, the English grammar she also understands. Internal factors in acquiring her second language were because she was afraid of being punished under the rules in the pesantren [13]. The external factor in acquiring her second language is the punishment and demand for two languages, namely English and Arabic, and she uses English more often. This English is also used in her work environment although she also uses Indonesian as her first language.

Then, FT is one of the 31-year-old IAIN Samarinda lecturers from East Kutai, East Kalimantan. Based on the results of my interview, FT uses Javanese as her first language because she lives in a Javanese neighborhood, and her mother is also from Java. Although her father was Banjarmasin, because the majority of Javanese people lived around her, and she was often with her mother, she mastered the local language, while the second language is Indonesian. Formal Indonesian language was acquired in school teachers instruct students that if students are in a classroom or formal situation, then students are expected to use Indonesian as long as learning has not ended [7]. The internal factor in acquiring this second language is because she follows her friend in the school environment and she does not want to be different from her friend, while the external factor is the rule from the school that students must use Indonesian in a formal environment. Indonesian is also one of the subjects in her school so she also understands more about language rules. This second language is influential in her work environment because it has long been imprinted so that she can use Indonesian as a formal language [14]. This also influenced her to understand and master the grammar and rules of the Indonesian. She acquired Indonesian as a second language at the age of 7.

4. Audios

This research data is not in the form of video but researchers used recording devices to obtain valid information through in-depth interviews directly in Samarinda, Indonesia, by recording the voices of the speakers, namely two lecturers of UINSI Samarinda.

4.1 The first lecturer's reflection in audio 1

Audio 1 explained that the first language used by F who was speaker 1 was Indonesian and her second language was English. One of the causes of Indonesian as her first language is because her parents come from different tribes and of course

have different regional languages so that her parents certainly cannot communicate using their respective regional languages because her mother's regional language F cannot be understood by her father just as her mother F also does not understand her father's regional language F. Unlike Indonesian which is the language of unity of the Indonesian nation can be understood by Indonesians who have attended formal education if they want to be understood in depth. F second language was learned while studying at pesantren. During her education at the pesantren, F not only used English during the learning process, but also used outside the classroom with her friends during dialog. This second language is used inside and outside the classroom for fear of being punished by the teacher. Actually in the pesantren environment, it was given two choices used in the pesantren, namely English and Arabic [15]. However, F chose English, so that she can be proficient in communicating English until now. On the other hand, English is also used in his current work environment even when she is faced with work both written and in spoken language.

Q: F, what is her first language?

F: Indonesian language

Q: Her second language?

F: English language

Q: What is the process of acquiring a second language?

F: Mediocre from the environment accustomed

Q: What factors influence both languages internally and externally

F: If it's internal, it's afraid of being punished, so it's motivated to learn. Then if from the external there was a punishment because I lived in the pesantren at that time, because the pesantren demanded two languages, namely English and Arabic, only I used English more.

Q: Does it affect in your work what second language is used in your work?

F: A second language is sometimes spoken, but I keep the first language

Q: Yes, thank you

F: Equally

The results of this finding show that the first Lecturer (F) feels anxious and afraid of being punished by her teacher so that it is easier to understand and apply the second language in the academic environment when communicating with her friends in pesantren even outside the classroom. The second language F English is used in the work environment, but still uses the first language, namely Indonesian.

4.2 The third lecturer's reflection in audio 2

Audio explains that FT's first language is Javanese, even though she lives in one of the areas in East Kalimantan. This happens because in the area where she lives is most of the immigrant population from Java province who certainly have Javanese regional language skills. In addition, her mother FT came from Java province as well and was often with her mother while in her childhood. When she started formal education in elementary school, she did not want to be different from her peers so she used Indonesian as her second language. In addition, she is also required by her teacher to use Indonesian in the school environment. So, inevitably she uses Indonesian to communicate in learning and dialog outside the classroom with her friends.

Q: FT, I want to ask you what is your first language?

FT: Javanese language

Q: Then the second language?

FT: Indonesian language

Q: How is your second language acquisition process?

FT: Indonesian, I got it when I started attending school. At school the teacher began to familiarize all the students with the use of Indonesian. Although at first I was very unfamiliar with Indonesian because Javanese with Indonesian was too far away. But the teacher teaches slowly and then until finally school continues and so on. Teachers always emphasize that if you are in a classroom, use formal language, which is Indonesian. You can again use regional languages or Javanese if the learning in class has been completed. So there I got a second language process through the school environment. Everyone in school while in class uses Indonesian. Yes, I cannot help but have to follow it. So, like I do not want to be different from my friends.

Q: If the external factor in acquiring this second language?

FT: Externally yes because schools have to use that. There are rules, we are in a formal environment, so we just follow them.

Q: Does your second language matter in your workforce?

FT: Of course, because even in the current work environment at IAIN Samarinda it uses Indonesian, so because it has been for a long time, so the Indonesian language can be formal, no longer use informal language, so know the grammar better, like that.

Q: At what age did you acquire this second language?

FT: About 7 years of age

Q: Yes, thank you Miss

FT: Equally

The two lecturers pointed out that the acquisition of a second language was because she did not want to be different from her peers and was also asked by her teacher to use Indonesian as a second language in class so that there was motivation to use it. A second language is also used in the work environment.

Affective filter hypothesis, this hypothesis emphasizes the importance of factors in language learners in the success of their second language acquisition. These factors are motivation, self-confidence, and *anxiety* [16]. This fear is the impetus for the first lecturer and the second lecturer, and the two lecturers to get more input and learners become more receptive to receive the input obtained so that progress is faster.

5. Conclusion of analysis results

This research shows that the two lecturers when they are students feel shy, anxious, and do not want to be different can make it easier to understand the second language and it can be said that the influence of the learning environment or association [17] and academic environment [18] was an internal factor in second language acquisition because of familiarity [4]. Then, external factors of second language acquisition skills are obtained in classroom or formal learning and of course must master the second language [19]. Based on the interview results of the two respondents, it can be concluded that the acquisition of second languages is due to affective filter hypothesis. F acquired a second language for fear of being punished by her teacher at the pesantren so she communicated in English with her friends in the pesantren [11, 20].

FT does not want to feel different from her friends [21] and at school also the rules must use the Indonesian in the school environment. This shows that a second language is not only acquired in class but also in an informal environment also in the social environment of friends at school or a motivating factor from friends because


they do not want to use a different language [22]. In addition, the findings of this study prove that the resource person also still uses and preserves culture in Indonesia by using regional languages and Indonesian both in the work environment and in the environment where the lecturer lives [3].

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Metamorphosis of English Language Learners' Behaviours in a Virtual Community of Practice (VCoP): From the Perspective of Online Knowledge Construction

Chuan Gao and Hui-Zhong Shen

Abstract

Advances in educational technologies have brought into being a variety of virtual community-oriented spaces to facilitate interactive language learning. Drawing upon data collected from discussion exchanges on a mobile social network application and focus-group interviews, this case study aims to identify and map any changes in the behaviours of a group of English language learners as a Virtual Community of Practice (VCoP) develops. Results indicated that a VCoP was well established through topic-based discussion for English language learning purposes on a mobile social network application beyond the classroom. In a total of four discussion sessions, a great number of 'questions', 'replies' and 'other' social statements were observed at an early stage, and 'clarification' consistently accounted for a relatively larger percentage throughout all sessions. The proportions of 'consensus building', 'judgement' and 'reflection' statements increased as the discussion proceeded, marking the changes in these English language learners' awareness and initiation in exercising higher-order thinking. However, 'conflict' and 'assertion' statements remained low throughout the discussion sessions, implying the role that culture might have played in impacting on learners' knowledge contribution behaviours.

Keywords: virtual community of practice, learner behaviour, English language learning, mobile-assisted language learning, online knowledge construction, interactive learning

1. Introduction

As a social activity, learning is deemed to happen more often when learners are involved in a community that helps accommodate interaction, collaboration and meaning negotiation [1]. Within the intellectual tradition of social learning theories, the notion of Community of Practice (CoP) was put forward to specify a social network that embraces and develops knowledge bases, beliefs and experiences focused

on shared and common practices [2]. Escalating complexities and affordances of educational technologies (e.g. online forums and social network websites) in the past few years have intrigued researchers and practitioners to create a Virtual Community of Practice (VCoP) to help facilitate teaching and learning activities beyond physical classrooms [3–5].

A VCoP has been defined as a space where a virtual community group is formed to establish ‘a team dynamic’ that nurtures knowledge construction [6]. Distinguished from other online practices (e.g. web searching; blogging), a VCoP prioritises interaction and experiential learning for individuals who share common interests yet are located in geographically separated areas [7]. A VCoP has been found to be helpful to support knowledge sharing, exchange and creation [8–10], professional training [11, 12], and language development [13].

As potential platforms to accommodate a VCoP, knowledge management systems (e.g. Moodle; Canvas) have been broadly deployed in tertiary institutions across the globe, to facilitate knowledge storage, retrieval and exchange [14]. However, it remains a challenge to boost the effectiveness of knowledge management systems in facilitating VCoP, owing to a lack of continuity in ongoing knowledge contribution [15], low frequency of usage [16, 17] and limited teacher-learner interpersonal relationship development [18]. Therefore, researchers continue to seek alternatives to complement knowledge management systems and design learning that is more individualised and participatory in a ubiquitous context supported *via* mobile technologies [19–21].

A number of empirical studies [22–25] on VCoP carried out in the wide landscape are primarily focused on the affordances of innovative educational technologies to facilitate virtual language learning experiences. It seems that participants of VCoP are often viewed as autonomous and collaborative agents in nature, regardless of the culture as well as the teaching and learning modes that they have previously long been accustomed to. This has led to a call for context-specific research on the metamorphosis of language learners’ behaviours that is likely to occur in the process where learners transition into VCoP and adapt to a routine of learning that is distinguished from what they have been culturally familiar with [20]. This study was conducted in an Asian educational context where English language learners are often reported to be less proactive and more dependent on curriculum and instructions, hence less exercises for development of higher-order thinking [26]. Adopting a mobile social network application, this study aims to investigate how mobile-assisted learning helps facilitate the development of a group of learners’ Virtual Community of Practice (VCoP) for English language practices, and how their learning behaviours metamorphose as the VCoP develops.

2. Literature review

Online discussion has been commonly conceptualised as a type of Virtual Community of Practice (VCoP) nurturing interaction and knowledge exchange [9], where content comprises topic-based interaction threads displayed *via* posts or comments. Knowledge seeking and sharing occur in the process of posting [10], and even brief posts can be an indication of (dis)agreement or support, thus contributing to the development of VCoP [27]. Online discussion has been found useful to promote (in)formal sharing of resources [28], reflection [29], peer interaction [30], and authentic experiential learning [11].

Role modelling and experiential learning have been reported as key components that help ensure effective implementation of Community of Practice [31, 32]. In a study on blog-based online discussion, Yang [28] found that teachers played a vital role in constantly initiating interaction and promoting learner reflection. Conscious modelling helps make tacit knowledge explicit to learners [33] and translate instructions into hands-on experiences *via* joint activities between teachers and learners [34]. However, learners also reported concerns about their grades and friendships being at stake by virtue of their posts (e.g. arguments against peer classmates' opinions), resulting in procrastination and passive learning behaviours [28].

Interpersonal relationships among members in a VCoP seem to play a more decisive role than expertise in helping spin out the functioning of a VCoP. Chen and Hung [8], through an online survey, found that the norm of reciprocity did not have a major influence on learners' knowledge contribution behaviours, while the degree of interpersonal trust and perceived knowledge sharing advantages played a more significant and positive role. Xu et al. [18] also found that learners participating in a community-based online learning space did not always intend to acquire knowledge or exchange information, but regarded it as a pathway to locating experts and seeking interaction.

VCoPs *via* knowledge management systems are normally curriculum-dependent, where course materials play an important part in securing learners' engagement and participation [14]. Such practices conceptualise knowledge as an object and may overlook the significance of knowledge exchange and creation that help nurture the dynamics in learning [35]. VCoPs supported by online social network applications, without potentially diminishing the volume of shared and stored information, are able to provide more accessible entries to knowledge and interaction, and facilitate relationship-oriented practices [36]. The asynchronous nature of online social network apps may also allow learners time for reflection to contribute to meaningful discussion, instead of making 'sweeping statements' [37].

Online social networking has been considered as a useful and effective mechanism to facilitate language learning while promoting interpersonal relationship development [38]. Pan et al. [9] integrated social networking support into an online discussion forum, aiming to enhance reciprocity and the development of interpersonal relationships among learners. The social networking support was found useful to strengthen learners' activeness in contributing knowledge and encourage dyadic interaction among virtual friends. A social networking supported VCoP can help its members move closer to full participation in professions through online (a)synchronous interaction or discussion [4], but member relationships in VCoPs (if not offline friends) have been found more fragile than face-to-face counterparts [39]. In a virtual learning environment, the weak ties among instructors and community members may discourage voluntary participation and knowledge sharing, resulting from a lack of personal benefits of sharing [40], a loss of knowledge ownership [41], and efforts needed to formulate thinking [15]. Therefore, careful design of instructions and activities is needed to help prolong the use of established VCoPs (e.g. practices that encourage learner cooperation and collaboration; making practices on VCoPs part of curriculum requirements) [42].

In a traditional classroom-based learning mode, a transfer of knowledge among student cohorts seems to be much limited to recycling learning materials and class notes [43]. However, social network applications help create a communal constructivist environment [44] where the collective knowledge contribution can be retained in a 'permanent' form, perhaps leading to a formation of 'a hidden curriculum' (i.e.

knowledge beyond subject content) [29]. WeChat was the mobile social network application adopted in the current study to facilitate discussion and language learning, which combines a range of functions into one platform including text/voice messaging, video conferencing, sharing of photos or documents, etc. Placing a focus on identifying changes in a group of English language learners’ knowledge contribution behaviours in the process of forming and developing a VCoP, this study aims to address the following two questions:

1. To what extent does WeChat-based discussion facilitate a group of English language learners’ development of VCoP?
2. How do this group of language learners’ knowledge contribution behaviours change as the VCoP supported by WeChat develops?

3. Theoretical framework

Community of Practice (CoP) was evolved from Wenger and Lave’s work on the apprenticeship as a learning model [45], referring to a group of people sharing a common concern or passion and interacting regularly to learn how to do things better [46]. Wenger [2] created a triangular skeleton describing the structure of a CoP by three interrelated terms—mutual engagement (‘members establish norms

Indicators	CoP domains
Sustained mutual relationships—harmonious or conflictual	Mutual engagement
Shared ways of engaging in doing things together	Mutual engagement Joint enterprise
The rapid flow of information and propagation of innovation	Mutual engagement
Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process	Mutual engagement Shared repertoire
Very quick setup of a problem to be discussed	Mutual engagement Shared repertoire
Substantial overlap in participants’ descriptions of who belongs	Mutual engagement
Knowing what others know, what they can do and how they can contribute to an enterprise	Mutual engagement Joint enterprise Shared repertoire
Mutually defining identities	Mutual engagement
The ability to assess the appropriateness of actions and products	Shared repertoire
Specific tools, representations and other artefacts	Shared repertoire
Local lore, shared stories, inside jokes, knowing laughter	Shared repertoire
Jargon and shortcuts to communication as well as the ease of producing new ones	Mutual engagement Shared repertoire
Certain styles recognised as displaying membership	Mutual engagement
A shared discourse reflecting a certain perspective on the world	Mutual engagement

Table 1.
Indicators of the presence of CoP [2].

and build collaborative relationships'), joint enterprise ('members create a shared understanding of what binds them together') and shared repertoire ('the community produces a set of communal resources'). This theoretical construct was used in the current study to help detect the presence of a CoP in WeChat-assisted discussion by examining learner behaviours against the 14 indicators of the three CoP domains (mutual engagement; joint enterprise and share repertoire), as shown in **Table 1**.

4. Methodology

4.1 Participants and research design

This case study was conducted at a Chinese multi-disciplinary university and a total of 18 English-major undergraduates volunteered to participate in this study. All participants met face-to-face in the classroom twice a week in a one-hour extensive English reading class, where a teacher-centred and textbook-led mode was predominantly adopted. WeChat was used by all participants as a communication tool on their daily basis.

Three discussion groups were created on WeChat (six participants in each) in this study, and the grouping arrangement was initiated by the participants themselves. In each virtual discussion group, participants claimed to be close friends with each other, an important factor that has been found to be influential on knowledge contribution behaviours in a VCoP [8]. A teacher who taught participants the extensive English-reading classes was involved in each of the three groups to assign and monitor discussion activities. Four sessions of topic-based discussions were carried out in a one-month time span. The discussion topics were initiated by the teacher, and the selection of topics was purposefully made in line with the participants' textbook for the reading classes to cater for their curriculum-based and examination-oriented learning preferences.

4.2 Data collection and analysis instruments

Data in this study were collected from discussion exchanges on WeChat and three follow-up focus-group interviews. Regarding discussion exchanges on WeChat, as researchers were not involved in the discussion to avoid any bias, written transcripts of exchanges were obtained from the teacher who led and monitored the discussion. A framework, developed by Pena-Shaff and Nicholls [47] to evaluate the knowledge construction process in online discussion, was employed to guide the analysis of discussion exchanges in this study. Using a sentence as the basic unit, Pena-Shaff and Nicholls grouped online exchanges into 11 categories: question, reply, clarification, interpretation ('reaching conclusions and making generalisations'), conflict ('debating others' points of view'), assertion (re-stating or 'defending ideas'), consensus building, judgement ('making evaluations'), reflection ('acknowledging learning something new'), support ('agreeing with other ideas') and other statements (e.g. 'social comments'). Guided by this analytical instrument, the discussion exchanges on WeChat were coded and analysed through content analysis to examine how discussion unfolded and proceeded as well as how the proportions of each type of knowledge construction statements fluctuated throughout four sessions of discussion. The coding of discussion exchanges was cross-checked by the teacher to make sure all exchanges were accurately interpreted and categorised.

Three face-to-face focus-group interviews with the participants in each WeChat group were conducted after the completion of four sessions of discussion. Interview questions were developed and adapted from those used in previous studies on learner behaviours in technology-assisted and community-based learning environments [11, 48, 49]. Given that not all participants gave consent to voice recording, field notes were taken to help collect interview data. Notes, including direct quotations, were shown to the participants after the interviews to confirm that their responses were accurately recorded, summarised and interpreted. Interview data were used to help interpret and explain results drawn from the analysis of discussion exchanges.

5. Results

5.1 Discussion exchanges on WeChat

All four sessions of online discussion commenced with the teacher posting direct instructions to inform the participants of the discussion topics, and sharing relevant materials (e.g. video clips and written texts) to promote thinking and reflection, as shown in Exchange 1 (**Table 2**) for example.

In the first and second sessions, most of the exchanges occurred between the teacher and individual participants, and peer interaction was barely observed. Teacher questions and initiation constantly played a role in securing the participants' engagement and production of discussion, as shown in Exchanges 2 (**Table 3**) and 3 (**Table 4**) for example. Each sentence was annotated as shown in the brackets based on Pena-Shaff and Nicholls's categorisation of online knowledge contribution statements [47].

In response to teacher questions, Student A in Exchange 2 (**Table 3**) constructed two statements asserting her opinions, two statements interpreting the video content and three statements reflecting on how her opinions were changed. As shown in this exchange, Student A was responsive and managed to elaborate on her perspectives through a variety of types of statements, but she was not observed to make any further comments on other participants' posts. This might imply her intention of simply completing the discussion activity assigned by the teacher, rather than anticipating interaction and opinion exchange with other group members.

Exchange 3 (**Table 4**) consisted of five social statements (other), three questions, one reply to the teacher question, one statement interpreting the video content, one statement asserting opinions and one statement reflecting on the topic. Constant teacher questions and initiation helped encourage Student B to participate and contribute to the discussion. However, among a total of 12 sentences in Exchange 3, only

Teacher:	<i>Dear class, here comes the first discussion topic for you. We are going to learn Unit 4 this week, which is about marriage and love. I will send you clips cut from a video about an American couple talking about marriage and love. Take some time to watch the clips and discuss the following questions:</i>
	<i>1. How, in your opinion, do people from Western culture see love and marriage?</i>
	<i>2. After seeing the video, are there any changes in your opinions?</i>

Table 2.
Exchange 1.

Student A: *In my opinion, I think Western people incline to follow their heart and feelings pertaining love and marriage [assertion]. However, this is also the reason why their romantic and passionate loves will not last for a long time which gradually influences value of marriage [assertion]. From these clips, I think they are intimate and positive couple [interpretation]. My opinion changed [reflection]. Firstly, not all the couple get married in a comparatively younger age go to a bad ending [reflection]. Secondly, after watching these clips, I think maybe there are some truths on love and marriage are universal [interpretation]. Last but not least, the Western culture I learnt mainly came from Western movies and series whose purpose is to show some values instead of a true reflection [reflection].*

Table 3.
Exchange 2.

Student B:	<i>I cannot open the video [other].</i>
Teacher:	<i>How about the others [question]? Let me send the clips again [other].</i>
Student B:	<i>Can we answer the questions in our first language [question]?</i>
Teacher:	<i>It's preferred if you can use English [other].</i>
Student B:	<i>I could not understand all in the video [other]. They speak too fast [other].</i>
Teacher:	<i>But have you got the main idea [question]?</i>
Student B:	<i>Yes, I think there's a big difference between love and marriage [reply]. In Western culture, I think people value marriage very much [interpretation]. It's very important for men to propose [assertion]. If they get married, it means they really know what marriage means to them [reflection].</i>

Table 4.
Exchange 3.

four sentences were related to the discussion content and interactions only remained between the teacher and Student B.

During the first and second sessions of discussion, since most of the exchanges were driven by the teacher, it was found that questions, replies, clarification and other social statements accounted for a larger percentage. Limited interactions among peers only started appearing towards the completion of the second discussion session. Peer interactions were more frequently observed in the third and fourth sessions, leading to a more balanced structure of knowledge contribution statement types. However, teacher questions and intervention continued playing a part in directing and monitoring the discussion, as shown in Exchange 4 (Table 5) for example.

Thirteen sentences in Exchange 4 were categorised into three teacher questions, two replies from the participants, one statement asserting opinions, one statement presenting a conflicting argument, two statements clarifying, three statements providing support and one statement building consensus. Guided by teacher questions, the participants were active in responding to each other's posts by showing (dis)agreement or providing support, resulting in a variety of knowledge contribution statements.

Table 6 shows the counts of different types of statements observed throughout the four sessions of discussion in this study. Figure 1 presents a bar chart of proportions of different types of knowledge construction statements in each of the four sessions.

As shown in Table 6 and Figure 1, a significant drop was observed in the number of 'question', 'reply', 'clarification' and 'other' statements (mostly social statements) towards the completion of the last discussion session. The number of 'interpretation', 'conflict' and 'assertion' remained relatively low throughout the discussion, but the proportions of 'consensus building', 'reflection' and 'support' largely increased. It was

Teacher:	<i>Any comments on their languages [question]?</i>
Student C:	<i>President Trump used phrase “years to come” to talk about events which will happen in the future [reply]. But he does not possess a clear blueprint for his future governance [assertion].</i>
Student D:	<i>I think he has a blueprint [conflict]. He promised to “Make America Great Again” and pledged to bring industrial jobs back to the United States [clarification].</i>
Student E:	<i>Trump also vowed to make “every decision on trade, on taxes, on immigration, on foreign affairs to benefit American citizens” [support].</i>
Student D:	<i>He also mentioned one specific foreign policy to eradicate Islamist terrorism from the face of the Earth [support].</i>
Teacher:	<i>How about the language he used [question]? Is it formal or informal [question]?</i>
Student D:	<i>The inaugural address by President Trump as he claimed, included considerable colloquial words which should not have been used in such circumstance [reply].</i>
Student C:	<i>That’s why this address was described by Los Angeles Times as “a truncated version of Trump’s campaign rally addresses” [consensus building].</i>
Student D:	<i>Whereas, the inaugural address of John F. Kennedy is considered among the best presidential inaugural speeches in American history [support]. In his speech, formal words are pervasively used, representing the authority of The Whitehouse and respect for each American citizen [clarification].</i>

Table 5.
Exchange 4.

Categories	Session 1		Session 2		Session 3		Session 4	
	Counts	Percentage	Counts	Percentage	Counts	Percentage	Counts	Percentage
Question	14	12%	16	18%	7	12.5%	3	3.5%
Reply	10	9%	11	13%	5	9%	3	3.5%
Clarification	38	32%	29	34%	7	12.5%	21	25%
Interpretation	8	7%	4	5%	4	7%	1	1%
Conflict	6	5%	1	1%	3	5%	2	2%
Assertion	4	3%	4	5%	2	4%	4	5%
Consensus Building	4	3%	4	5%	3	5%	8	10%
Judgement	1	1%	1	1%	9	16%	3	3.5%
Reflection	3	3%	0	0%	9	16%	14	17%
Support	6	5%	2	2%	2	4%	22	26%
Other	23	20%	14	16%	5	9%	3	3.5%
Total	117	100%	86	100%	56	100%	84	100%

Table 6.
Counts of knowledge construction statements in WeChat-assisted discussion.

interesting to observe that statements of ‘judgement’, though largely increased in the third session, significantly dropped in the last session, perhaps implying that diverse discussion topics might also play a part in eliciting different types of knowledge construction statements.

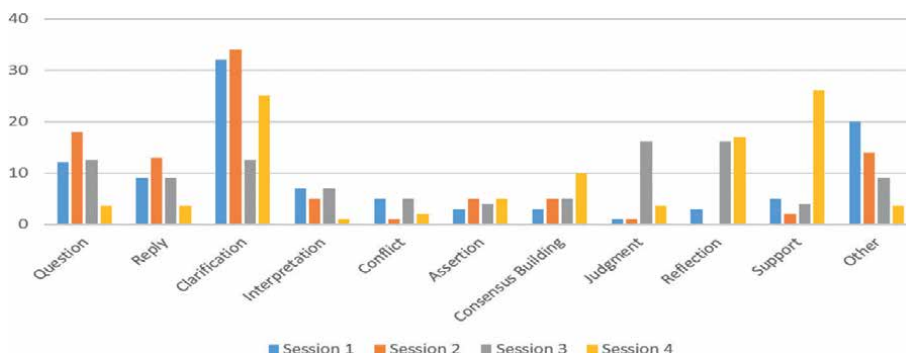


Figure 1.
 A bar chart of proportions of different types of knowledge construction statements in four discussion sessions.

5.2 Focus-group interviews

All participants agreed upon the usefulness of WeChat to help extend from coursebook-led language learning to more authentic and meaningful topic-based discussion, as well as provide them with more opportunities to practise the language beyond the physical classroom, as shown in the comments below for example:

“Learning on WeChat made it possible for all of us to get equal chances to express ideas and interact with each other. This cannot be achieved in a traditional classroom with 60 to 70 students. I would like to try more activities like this in the future.”

“I became much more active in online discussion groups than face-to-face classrooms. I asked more questions, more willing to share opinions and had conversations more frequently on WeChat. In classroom, I always feel embarrassed.”

Although participants were fully aware of their responsibilities to take charge of their own learning in discussion on WeChat, the teacher’s role was agreed to be inevitable in the process to secure attention and monitor discussion on WeChat, as demonstrated in the comments below for example:

“Interaction should be student-centred, not teacher-centred, when we discuss on WeChat, but it is important to have a teacher to supervise and make the online discussions compulsory.”

“Guidance and encouragement from the teacher are necessary. The questions asked by the teacher are easy to understand and helpful to encourage thinking.”

Besides the impact of different topics on the engagement in the discussion, the comments above alluded to how the nature of discussion (i.e. voluntary or compulsory) might potentially impact on the level of learners’ participation as well.

Participants also commented on their sense of belonging when engaged in the discussion on WeChat, where there were opportunities available for them to further develop interpersonal relationships and learn from each other:

“I felt we are privileged, as we are doing something that other students in other department are not doing. It was good practice that we can’t have in our daily study routine. The other group members and I become even closer to each other after discussion.”

“I see other group members make positive comments and I would follow them. Sometimes it is interesting to see different people make different comments and they are all reasonable.”

Regarding how participants responded to the situations where there were conflicting opinions posted by groups members, the use of avoidance strategy was frequently mentioned:

“I normally ignore the opinions that I don’t believe and I won’t argue, because we still see each other in class. It will be embarrassing if we have arguments in discussion. I only present my ideas, not conflicting with others.”

6. Discussion

Discussion on WeChat in this study, mediated *via* teacher instruction and intervention, was in nature role modelling and experiential language learning practices, which offered the participants opportunities to observe, self-reflect, participate and interact. In such a virtual community-based language learning space, the teacher served as an experienced community member who continued providing essential scaffolding (observed to be on the decrease towards the completion of the discussion) through follow-up questions or initiation to exemplify how to proceed with discussion. Conscious actions of the teacher’s modelling could be helpful to make the tacit knowledge or skill (e.g. critical thinking) more accessible to learners [33] and compensate for the lack of authentic and hands-on experiences in the language classroom under formal curriculum-based instructions [34].

The way participants responded to teacher instructions on WeChat at the beginning of this study was similar to those reported in previous research on the behaviours of Asian English language learners in the conventional classroom setting, who tended to be more reserved in group discussion and more responsive to teacher instructions than peer interactions [26]. The teacher-learner interaction pattern frequently observed in the first and second discussion sessions largely transformed into more peer interactions since the commencement of the third session. This may suggest that though a practice effect undoubtedly engaged, the teacher’s constant initiation and intervention contributed to setting a model and maintaining the flow of information exchanges in earlier sessions, and monitoring discussion in latter sessions. However, it remains uncertain to what extent the level of participants’ interests in different discussion topics and ‘a novelty effect’ (a short-term interest in new learning experiences) [50] played a part in affecting their participation.

Similar to the findings in the research integrating social networking in educational activities (e.g. Twitter) [51], WeChat in this study was found helpful to create a virtual language learning space that nurtured harmonious relationships among the participants and the teacher. This was reflected in a significant increase in the number of statements of ‘consensus building’, ‘judgement’, ‘reflection’ and ‘support’ in the third and fourth sessions, suggesting an enhanced level of engagement and interaction among peers,

as well as a number of participants' positive comments made regarding their perceptions towards WeChat-supported discussion in the interviews (e.g. 'I would like to try more WeChat[–assisted] learning'). However, it is worth noting that the statements of 'conflict' remained low throughout all four discussion sessions. This might be attributed to a long history of Confucian pedagogy, which highly values acceptance, tolerance and mutual respect [52], and seems to continue posing a major influence on shaping Asian English learners' way of approaching diverse opinions in group discussion. A lack of anonymity, commonly raised as a concern in the digital era [28], might be another factor that contributed to the participants' more neutral and supportive statements sighted in the current study, in order to avoid putting their grades and friendships at stake.

At the other end of the spectrum, the participants' tendency to avoid posting conflicting statements in the discussion may have set a barrier to the development of their critical thinking and problem-solving skills. This is in alignment with Shu and Gu's research findings [53] indicating that although a group of English as foreign language university students were found more active and interactive in an online learning environment than in the classroom, they were much less productive in carrying out in-depth discussion and reflection. Therefore, teacher intervention, again, appears inevitable to monitor and elicit thinking and reflection in an online learning setting, particularly at a preliminary stage where participants may still waver between conventional teacher-led classroom learning and emerging mobile-technology-supported interactive learning, which requires a higher level of agency. Given Asian language learners' preferences for reactive rather than proactive learning modes [42], the low frequency of statements of 'conflict' and 'assertion' observed in this study could also be partly ascribed to a lack of structural design of teacher questions, hence a limitation on the methodological design of this study.

Nevertheless, the established rapport among participants and the teacher helped reinforce a sense of community belonging and encourage collaboration, resulting in less detailed introductory preambles needed in the latter discussion sessions. Participants' repeated practices (e.g. reflecting on the given content and prior learning or experiences, replying to teacher questions and interacting with peers) could be viewed as the continuation of an ongoing enterprise, leading to not only the propagation of new knowledge, but also the build-up of mutual trust which has been argued to be more important than the norm of reciprocity to affect knowledge sharing and contribution [8, 18]. A larger proportion of statements of 'consensus building' and 'support' than 'conflict' in the discussion exchanges may also allude to the cultural homogeneity of this group of participants, who engaged in a shared discourse that reflected a mutually agreed perspective of the world in a broad sense.

As typical examples of shared repertoire in a Community of Practice [2], inside jokes or knowing laughter was unfortunately not spotted in the discussion exchanges in this study. This might be attributed to the short length of the study (4 weeks) and the presence of the teacher in each of the groups throughout all sessions. However, a number of 'other' social statements (e.g. 'Can we answer the questions in our first language') and the use of phatic expressions (e.g. a smiley face) were observed, suggesting the development of the interpersonal relationships among participants and the teacher. This may have helped reshape the participants' ingrained perceptions towards teacher authority in learning, leading to their initiatives in moving along the continuum from teacher-driven interactions to more self-regulated peer interactions towards the completion of the discussion (still monitored by the teacher, but to a much lesser extent). This may help eventuate in a routine of learning where learners more often exercise their agency in initiating activities for interaction or learning in general.

Through a detailed analysis of discussion exchanges on WeChat, a variety of knowledge construction statements observed helped provide evidence to corroborate the presence of CoP in the WeChat-assisted discussion in this study, as well as identify changes in these English language learners' behaviours as the VCoP developed, as shown in **Table 7** for details.

Indicators	CoP domains	Evidence of learner behaviours observed in WeChat-assisted discussion
Sustained mutual relationships—harmonious or conflictual	Mutual engagement	Harmonious interpersonal relationships were identified, evidenced in an increased number of statements of 'consensus building', 'judgement', 'reflection' and 'support'; the number of 'conflict' remained low throughout all discussion sessions (e.g. a statement of 'support'—"Trump also vowed to make every decision on trade, on taxes, on immigration, on foreign affairs to benefit American citizens").
Shared ways of engaging in doing things together	Mutual engagement Joint enterprise	Discussion was largely scaffolded and guided <i>via</i> direct teacher instruction and intervention in earlier sessions (e.g. teacher question—"Any comments on their languages?"). As discussion proceeded, participants more often took the lead to initiate interaction and comment on each other's posts.
The rapid flow of information and propagation of innovation	Mutual engagement	The flow of information was secured <i>via</i> teacher initiation in earlier sessions (e.g. teacher intervention—"But have you got the main idea?"); participants took more initiatives in contributing to the discussion repertoire and propagating new knowledge in latter sessions, drawing upon their prior learning and self-reflection.
Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process	Mutual engagement Shared repertoire	Introductory preambles were more frequently observed in earlier sessions (e.g. teacher instructions—"Dear class, here comes the first discussion topic for you.") and became less detailed in latter sessions.
Very quick setup of a problem to be discussed	Mutual engagement Shared repertoire	Much effort was needed from the teacher to provide instruction and initiate questions to promote discussion in earlier sessions. Participants became more aware of how to proceed with discussion in latter sessions and limited teacher initiation helped monitor the progress.
Substantial overlap in participants' descriptions of who belongs	Mutual engagement	Repeated practices in a similar manner were observed, for example participants taking turns replying to teacher questions and initiation; interacting with each other by either showing (dis)agreement or providing support.
Knowing what others know, what they can do and how they can contribute to an enterprise	Mutual engagement Joint enterprise Shared repertoire	Owing to the teacher's modelling and a practice effect, participants became more aware of what was expected and managed to proceed with discussion with limited teacher scaffolding and intervention in latter sessions (e.g. a statement of assertion—"But he does not possess a clear blueprint for his future governance").
Mutually defining identities	Mutual engagement	Exercise of the membership was more pronounced and visible in latter sessions where more peer interactions were observed (e.g. 'Interaction should be student-centred, not teacher-centred, when we discuss on WeChat, but it is important to have a teacher to supervise and make the online discussions compulsory').

Indicators	CoP domains	Evidence of learner behaviours observed in WeChat-assisted discussion
The ability to assess the appropriateness of actions and products	Shared repertoire	Not identified, argued to be resulting from limited opportunities created for learners to demonstrate. This can be developed through consciously prepared teacher questions or initiation to promote participants' reflection on, for example the degree of the importance or relevance of discussion content to their language development.
Specific tools, representations and other artefacts	Shared repertoire	In this study, English language output for knowledge construction in the discussion was the artefacts that were co-constructed by participants and the teacher.
Local lore, shared stories, inside jokes, knowing laughter	Shared repertoire	Not observed, argued to be ascribed to the short length of the study and the presence of the teacher throughout all discussion sessions.
Jargon and shortcuts to communication as well as the ease of producing new ones	Mutual engagement Shared repertoire	More often appeared in latter sessions after discussion exchanges more frequently occurred among participants (e.g. quotes from Los Angeles Times to provide support—'a truncated version of Trump's campaign rally addresses').
Certain styles recognised as displaying membership	Mutual engagement	For example, directly replying to teacher questions and posting comments or interacting with peers.
A shared discourse reflecting a certain perspective on the world	Mutual engagement	Evidenced in more statements of 'support' and less of 'conflict', while the cultural homogeneity is argued to play a part as well.

Table 7.
Indicators for the presence of community of practice, adapted from Wenger [2].

7. Implications

The establishment of a virtual Community of Practice (VCoP) in this study is 'technologically enabled' [29], rather than constrained by WeChat. WeChat only worked as a venue where virtual language learning practices were fulfilled through participants' joint knowledge contribution to the development of a 'hidden' curriculum as an extension of formal language classroom instructions. This particular mobile social network application was selected owing to its popularity in the setting where the current study was conducted, and could be substituted by any app that is widely embraced and serves similar functions in other educational contexts. However, when designing language teaching and learning in a virtual environment, more focus might still need to be placed on how language learners could possibly benefit from the activities and curated materials, rather than exhaustively seeking cutting-edge technologies to help facilitate teaching. Novelty effect resulted from an integration of innovative educational technologies may better be involved as an add-on to language learning experiences, instead of something that teachers highly depend on to promote learning interests.

Topic-based discussion supported by WeChat seems to be helpful to sustain interactive and learner-centred language learning beyond the physical classroom where there are normally limited chances for experiential practices, commonly observed in Asian language learning environments. Although learning in mobile-technology-assisted environments is often conceptualised to be autonomous and learner-led, teacher instruction and intervention still appear paradoxically essential to encourage participation, particularly at an early stage of the development of a VCoP. Careful

design of teacher questions/initiation could help provide opportunities for language learners to move beyond exercises of lower-order thinking and perhaps further proceed to step out of their culturally comfortable zone through meaningful and authentic discussion in the target language. It should also be noted that the implementation of a new learning mode needs to be repeated frequently enough for practice effect to take place, leading to the expected development of learner agency and less dependence on teachers and textbooks in a virtual learning environment.

8. Conclusion

The findings of this study resonate with those yielded in previous studies on the presence of a CoP in technology-supported settings, providing additional empirical evidence for theory building of CoP in an interactive ubiquitous learning environment supported by social networking [20, 28]. However, limitations on the methodological design may have affected the trustworthiness of this case study, suggesting possible directions for further research. Participants recruited in this study all share the same culture and were peer classmates in real life. Established interpersonal relationships and cultural homogeneity may have helped catalyse and maintain the flow of information exchanges, which makes it uncertain if the findings of the current case study could be possibly applicable to contexts where participants are not necessary offline friends and share diverse cultures. Participants' behaviours in the WeChat-assisted VCoP were analysed and interpreted by categorising their online discussion exchanges into different types of knowledge construction statements. However, it should be noted that some of the statements may fall into 'under-specified' categorisation [54], depending on different discussion topics and the intention which the statements could better fit in with. For example, the statement 'my opinion changed', acknowledging the input of new knowledge and coded as 'reflection', could also be viewed as 'a reply' to the teacher question. It appears to be thought-provoking in terms of if there is a need to specify another category of knowledge construction statements highlighting the role of teacher scaffolding and initiation in a VCoP.


The potential of a VCoP can be augmented if a present cohort contains knowledge and information that are beneficial for future cohorts. This may require teachers to curate materials and design activities that not only are linked to school curriculum or other possible VCoPs [29], but also intrigue a wide and long-term learners' interest. Since a novelty effect undoubtedly played a part in promoting learners' online engagement in this study, a longitudinal research design might be helpful to gather a larger set of empirical data mapping a wider scope of metamorphosis of learning (e.g. strategies, styles, habitus), especially after participation in a VCoP becomes an integral part of learners' routine.

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Section 2

Language Perceptions,
Ideologies, and Identity

What English Is and Does: A Study of Students' Perceptions of English and English as a Lingua Franca (ELF)

Marco Bagni

Abstract

Recent applied linguistic research into English as a Lingua Franca (ELF) portrays English as a transactional tool decoupled from native norms and values and urges a need for change in English Language Teaching (ELT), with ELF serving as a central concept in redefining teaching paradigms. This chapter summarizes qualitative research data illustrating the views on the contemporary sociolinguistic realities of English of a sample of undergraduate non-native English speakers (NNESS) students at an Italian university. The way the students characterized what English is and does, as revealed by interview data, interrogates ELF ideology, as the prevailing characterizations of English pointed to prestige and attractiveness, which English derives from culture-specific norms and values, in contrast to the ELF notion of a deterritorialized, denativized, and culturally neutral language. While the findings reported here have no immediate pedagogical relevance, they nevertheless highlight the importance of problematizing the notion of ELF.

Keywords: English as a lingua franca, English language teaching, language attitudes, globalization, global English, language ideology, culture

1. Introduction

The processes of globalization have accelerated the “spread” [1] of English in the world, and it has become common practice to refer to English as a global lingua franca. In countries where English is traditionally learned as a foreign language, working competence in English is nowadays emphasized in public discourse as a necessary skill to navigate the demands of modern society. In Europe, English has gained the position of a supra-national language of integration, functioning as a procedural language within the EU institutions while also increasingly operating as an additional language among the wider population [2]. As an effect of the Bologna process [3], English has been making inroads in sectors of paramount importance such as academic research and higher education (HE), where the last decade has witnessed the rapid growth of English-medium instruction (EMI) courses and programs. On top

of that, as on the Internet, content in English largely outweighs content in any other language [4]. Learners of English as a foreign language (EFL) have unprecedented opportunities to receive authentic target language input other than the abstract, idealized standard English of the EFL classroom.

In this societal context of the extraordinary vitality of English, recent applied linguistic research studies of the English language have urged the need for a paradigm shift in English language Teaching (ELT), based on the idea that the accepted English-as-a foreign language (EFL) pedagogical models may appear today outdated and possibly even obsolete. The distinct, though interrelated, research strands of World Englishes (WE) [5], English as an International language (EIL) [6], Global Englishes (GE) [7], and English as a Lingua Franca (ELF) [8, 9] have taken on the task of revising and rethinking the traditional tenets of ELT. To this day, an extensive body of research work has accumulated that explores the possibility of adapting ELT practices to reflect the changing dynamics of the English language, with ELF serving as a central concept in redefining language teaching paradigms.

A strand of applied linguistic studies has investigated the attitudes, perceptions, and opinions of the ELT stakeholders toward English and its pedagogy, with a view to confidently suggesting changes in ELT and possibly facilitating the paradigm shift from EFL to ELF. Attitudinal barriers to change identified in studies conducted in ELT contexts were the native speaker ideal and the ideology of the standard language [10]. However, in the same studies that revealed a generalized tendency to gravitate toward standard norms, ELF was not problematized as an ideological construct. Conceptualizing English as some sort of transactional currency, the ELF paradigm reproduces an ideology of English as a culturally neutral, denativized, and deterritorialized language. The English of ELF is thus decoupled from native speaker linguistic and cultural norms and no longer associated with the core English-speaking national communities that are commonly—and often stereotypically—reproduced in EFL classroom materials.

This study interrogates such ELT-related matters that have been a concern of applied linguistics research by integrating them within the framework of sociolinguistics of the English language in the globalized world. It investigates the perceptions of what English is and does held by a population of undergraduate students at an Italian university. The data under discussion were taken from a larger doctoral dissertation study [11]. In the specific, this work attempts to answer the following (interrelated) research questions: (i) What are the students' perceptions of English? (ii) Do the ways students think of what English is and does reproduce an ideology of denativized, deterritorialized language and culturally neutral language?

2. The spread of English and the rhetoric of English as a necessary skill

In the wake of globalization, applied linguistic studies [1, 12–17] of the English language tended to discuss the politics of the global spread of English from within an individualistic framework. To date, the prevailing characterizations of the contemporary realities of English have emphasized the key role of non-native speakers of English (NNEs) as free-willing subjects who turn to English for their own purposes and gains, driving the spread and supposedly leading the natural processes of linguistic innovation and change [see for example 18]. However, it has been noted that such individualistic and rational choice presumptions de-politicize the English language, “making it seem as if changes in language usage are ‘natural’ and not

connected to systemic issues of economic and political power or cultural prestige and identity” [19]. There are structural constraints to free individual choice, and it has been observed that in the geopolitical context of globalization, the promotion and the use of English “meshes with the globalizing of commerce, finance, politics, military affairs, scholarship, education and many grassroots networks” [20]. Systemic factors, particularly language-in-education policies, have contributed to establishing a “linguistic market” [21] in which English has greatly increased its value in recent times. In turn, the value acquired by English is arguably one main reason why competence in English is sought by the NNESSs.

Linguistic anthropological studies of globalization [22–23], on the other hand, have pointed to the commodification of the English language. Within the ideological framework of neoliberal thinking that emphasizes language skills as a form of human capital and a factor for individual talent, competence in English is often represented as key to securing employment and advancing prospects of upward social mobility [23–27]. In line with the principle of human capital theory [28] that “in a global economy, performance is linked to people’s knowledge stock, individual skill levels, learning capabilities, and cultural adaptability” [29], the processes of globalization have also recast the purposes of education. The new millennium has witnessed a global policy convergence in approaches to educational reforms, based on the principle “that education does not have any intrinsic ends as such but must always be linked to the instrumental purposes of human capital development and economic self maximization” [29]. The EU Education and Training strategy [30] has repositioned education as a determinant of economic performance and key to the individual’s participation in the new globalized economy. In this perspective, English, already the most widely taught language on a global scale with an estimated 1.5 billion learners worldwide [31], has now become a priority in the Member States’ education systems. In Italy, where this study was conducted, the need to foster students’ English language skills is a publicly voiced concern, particularly since Italians are still reported to fare rather low in terms of level of proficiency in English [32].

An integral part of the drive to redefine the role of education is also the recent growth of English-medium instruction (EMI). As observed by Galloway et al. [33], “EMI policies are related to government objectives to develop national human capital that can speak English. (...) and many nations see English skills as being an indispensable competency and key to their modernization and global competitiveness”. This rhetoric of English as a necessary skill to maintain a competitive edge in the globalized world [15, 31] constitutes “a strong justification for promoting English language teaching and learning” [27].

In addition, English is also the language of a globalized pop entertainment culture [34], and precisely the cultural affiliations that English indexes arguably contribute to its attractiveness, representing a further incentive to its learning. This cultural dominance of English has been related to the spread of models of consumerism, an integral aspect of the incorporation of diverse local realities into a single global system of neoliberal economy and governance [35–37].

3. English as a lingua Franca

The consolidation of the role of lingua franca is arguably the main feature of the sociolinguistic realities of English in the era of globalization. Already at the turn of the century, these realities had led to the emergence of a distinct area of ELF

research. Seminal works of applied linguistic research into ELF [38–41] were mainly of a descriptive nature and remained anchored to the principles of WE research [5], which fragmented the image of monolithic English and legitimized the NNEs as owners of the English language. However, with the second decade of the twenty-first century, ELF research moved away from the pluralizing approach of WE to take on board the post-structuralist reconceptualization of language, culture, and their relationship [42, 43]. In tune with the concept of “translanguaging” [44], the distinguishing multilingual nature of ELF communication was characterized as emerging across individuals, time, and space. Concurrently, the ELF research field converged with that of transcultural communication in highlighting the fluid, contingent, and emergent character of culture and pointed to the need to move away from essentialist connotations of cultural identity with national languages and cultures [45]. Baker [46] illustrated how ELF interactions construct links through and across different cultures, as complex links with culture emerge “in situ as a result of adaptation and negotiation on the part of the participants.” From this perspective, the English language is decoupled from the cultural models of the core English-speaking countries and appears as a neutral tool for communication between and across cultures. In this sense, the ELF paradigm foregrounds the instrumental function of language, separating it from its expressive and symbolic function of groupness [19].

3.1 ELF pedagogy

As the above-sketched theoretical developments were seeking to legitimize ELF research and its object in the face of harsh criticism [47–49], the focus of much ELF discussion concurrently shifted toward issues of pedagogical concern. Since Jenkins [50], various studies have explored the pedagogical implications of ELF, aiming to both meet the needs of learners and better equip English teachers.

Throughout the years, several studies [17, 51–59] discussed the entire range of the pedagogical implications of ELF. Interest around the need to promote critical reflection upon current EFL pedagogy that tends to be anchored to native English (NE) models and adapt ELT practice to the realities of ELF has grown also across the fields of WE [5], EIL [6], and GE [7]. Common to all the proposals for a post-normative, ELF-informed approach to ELT is the underlying view of English as a neutral tool for cross-cultural communication, which separates language from its cultural ties to a specific national community of native speakers. In this sense, ELF delegitimized the cultural models associated with English in the EFL curriculum and learning materials. Also, it brought to question the notion of “integrative motivation” [60] implicit in the EFL model, which is premised on the idea that the objective of foreign language learners corresponds to a desire to integrate and adapt to the culture of the target language group. This instrumental view of English as a culturally neutral tool has been gathering momentum and is now surfacing in much of ELT discourse [61–66].

However, as attitude studies have suggested, there seems to be a contradiction between the notion of English as a culturally neutral lingua franca and the still prevailing idea of learning English in a culturally appropriate way. Structural barriers to change in ELT have been widely acknowledged [67–69] and particularly strong adherence to standard language ideology appears to exert a decisive influence on how students perceive English and greatly contribute to the ways it is taught. Standard language ideology represents the false belief that the idealized, abstract standard variety

of English codified in grammar textbooks is the only correct and therefore legitimate variety [10]. Adherence to standard language ideology is perhaps not surprising, since English proficiency in ELT is traditionally assessed against the benchmark of standard English, and assessment practices have a washback effect on the learning target and the content of ELT practices.

3.2 Studies of attitudes toward ELF

Seminal studies of attitudes toward ELF [see 13, 70, for a comprehensive review] conducted with learners and teachers both in EFL countries and in a target language environment had the specific aim of understanding whether an ELF-informed approach to ELT would find immediate support. A common thread was that teachers and learners alike tended to value adherence to the prescriptive norms of the recognized standard, even when they were quite open toward incorporating a more inclusive ELF-aware perspective into ELT.

Although more recent research with Italian teachers [71–73] was reported to suggest an “emerging ELF awareness” [72], a conservative orientation was found to be the prevailing trend also in most research studies [see, for example, 74–77] carried out over the last few years with both pre- and in-service ELT practitioners in other EFL settings. As in previous studies, attachment to standard English was revealed as a chief barrier to innovation, with the clear suggestion that although ELF ideology was accepted as an abstract principle, it tended to be rejected as a classroom practice [11].

At the time of the investigation reported here, only a few notable studies [see for example, 78] had shed light on the learners' views of ELF, finding that students were under a strong influence of the native speaker ideal and standard language ideology. However, students' experience with ELF communication was generally found to question the connection between adherence to NE norms and intelligibility [see for example, 79]. Also, particularly learners in a target language environment were found to display much more tolerance of ELF than their peers in an EFL setting [see for example, 80]. Previous research thus suggested that the ELF principle of prioritizing successful communication over conformity to standard norms can hardly find any support in an instructional setting that positions potential ELF users as learners, who will understandably set their goals accordingly.

Other insights into the learners' perceptions of ELF are provided by studies that specifically targeted the attitudes toward the NESTs and NNESTs [see 11, for a comprehensive review], whose findings overall suggested that most language learners preferred to follow a NE model and understood target culture as the national cultures of the core English-speaking countries. A strand of studies [see 81] investigated the attitudes toward NNESTs and NESTs of students receiving EMI in the framework of the internationalization of HE, which has been defined as “a prototypical ELF scenario” [82]. A common finding was that learners in an EMI setting expected their lecturers to be models of target language use and understood the latter as NE, in contrast to the ELF principle of departing from native speaker norms.

Existing studies that look at the teachers' and students' attitudes to ELF had the specific aim of advancing a paradigm shift in ELT but did not interrogate the notion of ELF as an ideological construct. It is hoped that this contribution can help bridge this gap in research.

4. The study

4.1 Research context

The study was carried out at the University of Modena and Reggio Emilia (UNIMORE), a medium-sized university located at the heart of one of the main industrial hubs of Italy, a dynamic economic and cultural environment. The participants were reached within the Department of Communication and Economics (DCE), the Department of Education and Humanities (DESU), and the Department of Studies on Language and Culture (DSLCL). The choice to find the participants for this study in three different departments responded to the need to involve a varied population of students, including non-English majors.

4.2 Participants

The participants for this study were selected through convenience (non-probability) sampling [83]. Therefore, the representativeness of the sample was not sought. Twelve participants were accessed within the DSLCL, where they were attending an English-medium instruction MA program. Nine participants were reached in the DCE, and seven were found in the DESU. In both DCE and DESU, the participants were attending traditional Italian-medium BA and MA programs. All the participants were NNESSs who had been learning English mainly through formal instruction. Two were non-native speakers of Italian, one from Russia and one from Vietnam.

4.3 Data collection procedure

The research approach adopted for this study was qualitative and interpretative, focusing on the transcripts of twenty-eight in-depth, semi-structured, face-to-face interviews carried out for a wider doctoral research project. This instrument of data collection is characteristic of direct approaches to attitude studies [84] and folk linguistics research [85]. While preserving the free-narrative structure of the interviews, the semi-structured pattern allowed to guarantee consistency between them and ensured coverage of the same topics. All the topics covered in the interviews related to the participants' personal experience with the English language, both in and out of the EFL classroom.

The fieldwork took place between February and May 2020. Due to the restrictions imposed in Italy during the Covid-19 pandemic lockdown (from March to June), twenty interviews were conducted at a distance via Skype and Google Meet. Only the two interviews with the non-native speakers of Italian were conducted in English. All the other interviews were conducted in Italian to make the participants more comfortable, which allowed them to better articulate their views and avoided the risk of limiting discussion.

4.4 Data analysis procedure

The interview transcription conventions are shown in **Table 1**.

The strategy adopted for the analysis of the interview data can be classified as qualitative content analysis [87–89], a systematic process of classification based on coding and identifying themes or patterns in a text. The content of the speech produced by the interviewees was taken at face value, and to gain direct information from

S1, S2, ...	Students, numbered according to date of interview
(.)	Brief pause in speech
(3)	Approximate length of pause in seconds
:	Lengthening
.	Falling intonation and pause
,	Continuing (list) intonation
molto numerose	High-rising pitch (uptalk)
CAPS	Emphatic or contrastive stress
ing-	Abrupt cutoffs and false starts
@	Laughter (one @ per syllable)
proficiency	Utterances in English
okay	Speaker modes (open list)

Table 1.
Transcription conventions. Adapted from ref. [85, 86].

them, the categories for the analysis were allowed to flow from the data. The coding of the interview was an iterative, non-linear process, and a “second-level coding” [88] of the whole corpus of interviews was carried out that led to the development of the thematic framework of analysis. This in turn allowed us to visualize the occurrence of themes across all interviews and identify patterns in the entire data set. This study focuses on the interview extracts in which the themes were categorized under the broad category named ‘What English is and does.’

4.5 Results/findings

The participants’ views of what English is and does are reported in this section according to the main topics identified. Due to space limitations, only a few extracts from the interview transcripts are reported to illustrate the results of the analysis. Omitted parts are represented by three stops between square brackets: [...]. Extracts that run for less than three lines are reported with quotation marks. Extracts longer than three lines are in italics and set off from the main paragraph. The extracts were translated in a faithful manner by the author (a native speaker of Italian) to be completely faithful to the intentions of the interviewee.

4.5.1 *British and American English*

A tendency was observed to discuss variation in terms of a dichotomy of American English and British English. Several interviewees identified British English as a formal register, while American English was variously represented as an informal, slangy register. The influence of the standard language ideology was evident in all the interviewees’ comments that juxtaposed British and American English, as they reflected the common sense notion that the English people strictly adhere to the rules of correctness, whereas the Americans do not hesitate to deviate from correct English. According to this folk opinion, rather than two distinct varieties of English, each with its respective norms, there is a primary, original, ancestral norm, and the Americans take the liberty to deflect from it. A stereotyped view of American English as “simplified” English and “slang” was found to prevail in the data, and for its associations with informality, this characterization of American English arguably testifies to the relevance of US entertainment culture as the main source of out-of-class language input for EFL students. On the other hand, the almost unanimous characterization of British English as “the original” English, “the pure one,” and its associations with

a formal register pointed to the prestige that British English derives from its institutional support and the images of authenticity, heritage, and tradition that it evokes.

This view of English in dichotomous terms nevertheless coexisted with a view of English as a language of global dimension.

4.5.2 English as a global lingua franca

While only a few interviewees put into perspective the common sense notion of English as a global language, observing that it is not universally spoken and understood, most of them described it as such and highlighted its role as an international link language. S9, for instance, claimed, “whether we like it or not English is the basic language of communication for anything [...] a language that connects everyone.” S3 and S7 referred to it as a “bridge,” and S2 as a “meeting point.” S16 testified to the rise of English as a working language for internal communication in Italian business environments, recalling her work experience in an Italian-based multinational company where she had “used English on a daily basis,” and pointing out, “even if [...] there was one person in a meeting who was not Italian and we had to conduct meetings in English (1) and it was sort of (.) e:r it was normal (.) when actually it is not quite a normal thing.”

Seven participants, of which only one (S4) had not attended ELF-informed courses, used the expression “lingua franca.” S4 pointed to the role of English as a lingua franca of academia, mentioning “English which often is a language I am inclined to say a lingua franca allows to: access many more resources.” S19 also emphasized the advantages of ELF for scientific and academic research. S28, while acknowledging that English is not spoken universally, appeared to accept with pragmatism the realities of ELF, claiming, “after all, we are still living in an epoch when knowing English is necessary there is not any other lingua franca in sight.”

Whereas all the participants who broached this topic highlighted the advantages of ELF, a few of them revealed a more ambivalent attitude toward it. Commenting on the impact of the advance of English on the other national languages, S25 argued that “the global presence of English e:r therefore as a lingua franca represents a threat to any language (.) if these other second world languages cannot defend themselves.” Other students expressed the concern that the primacy of English may lead to the marginalization of other languages and cultures. S27, for instance, spoke of the “paradox” inherent in English, a language “spoken by everyone” that facilitates international communication, on the one hand, but one whose advance poses “a threat to linguistic and cultural diversity.” S22, a native speaker of Russian, hinted at the risks of erosion faced by the national traditions of academic research, especially in the field of humanities, claiming,

<LNen>the fact that the English is language of science and technology in some way e:r uhm like e:r do- it doesn't allow (.) the (.) ide- the (.) the thought (.) of (.) Russian Chinese French scientists er to progress [...] the most prominent scientific journals are all language e:r are all published in English so the scientist have to (.) like think in advance and they will present and they will put their ideas in English maybe in some way it affects the e:r u:hrm (.) most in humanities @@ it affects the: national way of thinking which is way of thinking in our own language.</LNen>

The same risks were also pointed out by S26, who understood the problem of having to produce knowledge in English as one of dumbing down the quality of academic content:

obviously those shades and those possibilities of expression that are there in other languages are lost if a paper is written in English instead of in the language (.) er: I mean of (.) native language of the researcher, or I mean er: (.) and obviously er: it also lowers let's say (.) the level even if involuntarily you know? er: the quality of a work.

Concerns about the risks of the advance of English in academic discourse leading to the erosion of the national traditions of research, as they had recently appeared in the European public debate, perhaps influenced the views of S9, S17, and S26. These students clearly suggested that English should coexist in a balanced ecology that also allows the national languages to thrive.

S29 perceived the privileging of English as a form of overt discrimination and remarked that English had been “imposed,” “an indirect imposition,” a “transformation that is achieved over time” that “one does not notice,” so that in the end “it is difficult to understand what the real cause was.” She thus suggested that the spread of English resulted not from overt coercion but from a series of social and historical processes that cannot be easily disentangled. Unlike most other interviewees, S29 showed an acute awareness of the history of the global spread of English, referring to the colonization of the Americas and Africa and mentioning military power as a key factor. Nevertheless, she also accepted the primacy of English with a pragmatic attitude and did not question the lingua franca role of English, emphasizing the advantages of having a widely spoken language that can link speakers of different L1s.

These findings overall indicated that a liking for the English language, as well as unconditional acceptance of its international functions and advances in contemporary non-English-speaking societies, can coexist with strong feelings for one's own national language and culture, and more generally a positive attitude toward multilingualism. More than that, as it is shown in the following section, some interviewees questioned the idea of global ownership of English.

4.5.3 English and cosmopolitanism

Commenting on the global spread of English, S5 pointed out that English can nowadays be said to belong to “almost everyone,” although she also clarified, “when I think of English I think maybe also of the social classes that can afford obviously also the let's say access to education and obviously to the language courses because (.) they do have a cost.” The clear implication in S5's comment was that not all students can afford the costs entailed in developing proficiency in English. She thus shifted the focus of the discussion from the geographical spread of English to the social distribution of competence in English. S14 also commented on the costs of study abroad programs, and pointing out that only a minority of students can afford them, she raised an issue of inequality in access to those resources that more than any others facilitate the attainment of a high level of proficiency in English.

Presenting her views on the same topic, S17 suggested that English is a crucial element of an international cosmopolitan class structure, clearly indicating that competence in English is an index of socioeconomic background. She expressed begrudging admiration for those students who, unlike her, had had the opportunity to acquire more than one language naturally, by living abroad and studying in “very expensive” private English-medium international schools. Referring to a friend of hers who had attended one such school in China, she confessed, “those whom I hate most” and “I envy so much” are “those students like my friend who speaks three languages.” In a subsequent turn, she also mentioned a family she had met in Jordan,

whose kids had been attending an English-medium school, pointing out that it was “one of the wealthiest families of the city” and that their kids “only hung out with children of wealthy people.” Based on those considerations, she concluded that the opportunities that facilitate the attainment of native-like proficiency represent some sort of privilege that is reserved for the few, claiming, “I don’t believe that English is a language accessible (1) to all.”

Study abroad experiences broadly speaking, are regarded as an opportunity for families to accumulate linguistic capital and invest in class mobility. It is known, however, that study abroad programs are highly expensive, and in this sense, they deepen class inequality. Indeed, wealthy families possess better means to get their children ahead in a neoliberal social order in which competence in English is a highly coveted asset and where young learners are bound to feel pressure to become successful users of English. While the European Union does promote study exchange programs and traineeships, the Italian education system does not provide less affluent families with sufficient financial support for any such overseas experiences as those referred to by the interviewees. The ties between English and class are in this sense unmistakable, as are issues of inequality arising in a society that emphasizes English skills as a necessity.

4.5.4 English as a necessary skill

Twenty-five interviews in total included comments that characterized English as a necessary skill. Some interviewees were categorical in claiming that English was indispensable in today’s world. Some instead hedged their claim, drawing distinctions between different domains of language use or highlighting the value of other foreign languages. Others even questioned the view of English as an indispensable tool, implicitly suggesting that the commonsense notion of a necessary skill must not be taken literally.

S8 believed that “even a laborer nowadays hardly he cannot have at least a minimum competence in English.” Along the same lines, S20 also argued that “some knowledge of English is the basic nowadays. I mean it is not an added value anymore but a minimum requirement”. S9 claimed that “when one needs to: have more precise information about something you search it in English,” which seemed to imply that to be validated, knowledge must be in English, as if the English language were the only source of all significant knowledge. S25 explicitly linked proficiency in English to individual competitiveness, as she commented that “ineffective teaching of English in high schools (...) already represents let’s say a weakness with which our human capital (...) will enter the labor market.” Recounting her work experience mentioned above, S16 remarked that “for us it was fundamental that the person that spoke English that had good knowledge (...) good knowledge of English,” and repeated five times that it was “essential.” S5 commented that even if “it depends also on the type of job [...] right now one has to know English that is basic competence in English is an important asset.”

S21 argued that whereas in certain job positions, working competence in English is completely unnecessary, an English-proficient candidate will always be preferred over the non-proficient one, because English “is an added competence which is anyways useful for almost any job [...] is actually a (...) being connected somehow with with the outside world not not knowing only your language it is like some sort of narrow-mindedness.” Her argument clearly suggested that English proficiency is perceived as a mark of prestige. According to this view, English, rather than literally being a necessary skill, is a status symbol, and it is by virtue of this symbolic value that English

enhances one's competitiveness in the labor market, irrespective of the actual need to use it on the job. S17 also puts the importance of English proficiency in the labor market in perspective, suggesting that as much as it is represented as necessary, English by itself is not automatically a gateway of opportunities: "it IS NOT that it immediately opens up the doors of the work world for you [...] is absolutely an added value surely it is but it's not all that." However, she also clearly suggested that being proficient in English nevertheless gives one an edge, as she commented "I believe that it is a that En- English is (.) also a discriminating factor. Like S21, she thus perceived proficiency in English as a sign of social distinction, rather than literally a necessary skill.

Two interviewees emphasized the importance of knowledge of other foreign languages for employability. S14, who pointed out that an exclusive focus on English may be misguided, since "just as you know English at least from my own point of view the more languages you know the (.) better it is," and S24, who remarked that "English actually is not always a passe-partout." While S14 and S24 suggested that the notion of a necessary skill ought not to be taken literally, they did not seem to challenge the prevailing characterization of English as a highly advantageous tool.

4.5.5 *The culture of English*

Although all the interviewees acknowledged the instrumental function of English, a particularly salient topic that emerged from the interview data was also the relationship between language and culture. Most participants represented English as a language that is loaded with specific cultural values. S12 commented that English "is not only a means of communication [...] one associates it immediately to the United States or England and to all the all the monuments and the history that lies behind the language." S5 said, when thinking of English, "I think of American or British culture but that is because they are the most present I don't know in TV series, TV, and also in newspapers."

Several interviewees clearly suggested that their perceptions of the English language were strongly influenced by US entertainment culture. S28, for instance, commented that "nowadays we are very much dominated by (.) TV series, movies, actually especially American ones." S18 observed, "from what I can see on the social media, TV series [...], movies and pop songs the language of globalization is English yes it is but English in its American version." She also emphasized the key role that pop entertainment culture had had in fostering her motivation to learn English and contrasting English with German, she commented,

as regards English I have constant and continuous feedback (.) from music to cinema from from the news [...] I do not have incentives towards the German language because [...] German music, but I do not listen to it (.) also because I don't (.) I mean it doesn't not not get simply it does not not get here does it? I should search for it I should it presupposes an active attitude which I do not have towards the German language [...]. I do not even get the same incentives.

In a subsequent turn, S18 explicitly linked the attractiveness of English to a globalized American youth culture:

there is this girl whom we look for and oh my look for sorry we follow on social media [...] she attended the American school a-s well from preschool to university therefore she o- often speaks and also quote unquote teaches her <LNen> followers </LNen> e:r

some idiomatic expressions [...] expressions that actually come from TV series a:nd or online memes. like now there is this Karen fad Karen <LNen> I'm a Karen </LNen> to delineate a person in her fifties who complains about a lot of stuff things things like that

No doubt influenced by her experience as a high school exchange student in the USA, at various points throughout the interview, S18 manifested an enthusiastic attitude toward American culture, which appeared to mirror a desire to integrate into it.

All the allusions made in the interviews to pop entertainment culture as a key source of out-of-class target language input and a factor for motivation to learn English were indications as to the consumer appeal of English. Clear suggestions that English indexes *coolness* and sophistication were found also in the interviewees' comments on the use of Anglicisms in the Italian language. Claiming that Italians use Anglicisms for mere reasons of prestige, S25 pointed to the connotations of high status that English loanwords carry: "what Italians do when they repeat Anglicisms and overuse them is in order to raise (.) the the their own level their own they sort of give the impression of being e:r let's say sophisticated and learned." Along similar lines, S17 highlighted the connotations of the prestige of Anglicisms, commenting that some of her friends used American English "slang" expressions to "show off," "make an impression," and prove that they are proficient in English, as if to say, "look I know how to speak slang," "look I know English better than you."

S6 instead observed that Anglicisms can be used "to better express something," and "to find the best words to say something". Referring to the adapted loanword "fittare"—from the English verb 'to fit,' which she had frequently found in social media, she commented,

FITTARE with also a transformation e:r in Italian e:r which is exactly the emblem in my opinion because (.) fit does not have a real translation in Italian or if it has one I cannot recall it now therefore it is by itself indicative of how more quickly it comes off the top of your head than the: the Italian word because it is simpler I don't know [...] one can say by some sort of play on words that the word fittare fits FITTA BETTER @ in the the spoken language

While a positive attitude toward English conceivably shaped S6's perception that Anglicisms get through the message better than their Italian equivalent, the marked choice of "fittare" also perhaps corresponded to a desire to express in-group solidarity with a cosmopolitan generation of young Internet users.

S18, who communicated that she constantly used English expressions in her text conversations with friends, also believed that English words better convey the intended meaning than their Italian equivalents:

a good part of our messages a:re in English or anyways sometimes m- mixed English and Italian beca:use there are <LNen>reference</LNen> to: meme o:r articles or videos e:r that are indeed in English therefore it would not not make sense to translate them and their meaning would get lost [...] it is not that they are untranslatable but i- in English in my opinion they co-better convey the message

As noted above, S18 expressed a strong emotional attachment to US culture, and it seems reasonable to conclude that her enthusiastic attitude toward American English and culture shaped her perception that an English expression better conveys the intended meaning than its Italian equivalent. Also, like S6, she clearly revealed

that English expressions represented marked choices, and it is possible that S18 and her friends used them not only with the intent of demonstrating their high level of proficiency in the language—itsself a sign of distinction—but maybe also of signaling their in-group solidarity with the native speakers with whom they associated those expressions and their culture.

S9, herself a highly proficient English learner who had spent three years abroad in an English-medium international school, seemed to signal her positive attitude to English by means of her intonation. She repeatedly reproduced in her (Italian) speech the high rising terminal contour (HRTC) (also commonly referred to as ‘uptalk’) that is typical of certain English speech styles but is utterly uncommon in Italian. The category of “pragmatic borrowing,” referring to “a variety of phenomena whose common feature is that they do not contribute to the propositional content of utterances but act as constraints on the interpretation process” [90] extends the borrowing of linguistic features to intonation, including the use of HRTC. Twenty-one occurrences of HRTC in total were counted throughout the forty-two turns of her interview; the extract below (intentionally kept in Italian) shows three instances of it when she answered the researcher’s question whether she ever happened to use English in her hometown:

u:hm <?> poco in realtà </?> nel senso che: lo utilizzo appunto: <?> tanto tra amici </?> però sono amici che sento solo (.) via Skype o <?> o diversamente </?> u:hm un po' con mia sorella perché mia sorella ha studiato per un anno in America quando era al Liceo.¹

The significance of uptalk in NE varieties is a complex one and has undergone changes over the decades (and so have the attitudes toward it) [91]. However, considering the widespread use of uptalk in the speaking habits of the younger generations of NESs, it can be hypothesized that by transferring it into Italian, S9 was possibly aiming to be identified as an internationally educated cosmopolitan and highly proficient English user and perhaps lay claim to the English language.

In brief, all the interviewees’ references to Anglicisms clearly testified to the appeal that English derives from the specific cultural affiliations that it indexes as the language of US entertainment culture and youth cosmopolitanism.

Like S18, S26 also highlighted the lack of “a culture surrounding” German as a disincentive to its learning and characterized the globalization of English as a process of Americanization. However, not only did she refer to entertainment culture, but she also mentioned US academic culture:

English is so widespread e:r as a language of communication for those who e:r do not speak it as first language (.) especially because of the e:r American influence [...] all the tv series that we watch nowadays are American (.) [...] the majority of the textbooks that are used e:r in university e:r they are often American e:r almost all the economics textbooks for instance

Likewise, S19 perceived the adoption of English as a medium of instruction to go hand in hand with the assimilation into a specific academic culture. She claimed that marketing was “quintessentially an English-medium subject” and that it was natural

¹ Translation: *u:hm <?> very little actually </?> I mean e:r I use it <?> indeed: with friends </?> but they are friends whom I only hear from (.) via Skype or <?> or otherwise </?> u:r a little with my sister because my sister studied for one year in America when she was in high school.*

for her to associate it with the English language and US culture, as “one of the greatest marketing authors was an American.” Restating her perception of an inextricable link between certain disciplinary fields and the English language, she repeatedly remarked, “it would sound strange to me” to receive the same academic content in Spanish (her second language of choice in her degree program) and made an implicit association between English and modernity, remarking,

something that is completely in English in my opinion really gives one (.) I don't know that added something @ the aspect how can I say? mo:re u:r ur more advanced aspect of the subject that is to think of doing marketing in Italian why not? but in English (.) I don't know it is e:r mentally it is perhaps more interesting

In the same vein, S13 represented English as the vehicle of a culture-specific line of scientific research:

I would like to do research after graduation [...] English is the most used language therefore it is very useful [...] we have a center (.) a rehabilitation center for kids u:r where the cabas method is used it is a method used especially for the with autism particularly a:nd it is a method that is studied mostly e:r in America [...] most research and texts are in English

Speculating whether the CABAS technology of instruction [92] that had fueled S13's investment in taking her learning of English further has some universal value is beyond the scope of this analysis. However, as a matter of fact, English as an academic lingua franca did not turn out from her comment as decoupled from a specific culture.

In conclusion, the interview data revealed a prevailing characterization of English that is incompatible with the ELF notion of English as a culturally neutral language.

5. Discussion

In relation to research question (i) (What are the students' perceptions of English?), the analysis of the interview data revealed that the students who participated in this study characterized English as a key skill to navigate today's society. It was found that English tended to be perceived as a status symbol, as some students were reported to believe that high proficiency in English represents a mark of social distinction that gives one an edge in today's globalized society, regardless of the real need to use the English language in a work context. As argued by S21, English proficiency looks good on a young job applicant because it indexes openness and cosmopolitanism.

The data suggested that the prestige of English was related also to its symbolic value as a gateway to a cosmopolitan citizenship, and several indications were given that English is a crucial element of an international cosmopolitan class structure. In this respect, S5's and S17's comments were very telling, as they raised issues of inequality in access to the resources that facilitate the attainment of native-like competence in English.

The analysis also suggested that in the students' views, the English language carried both connotations of prestige and highly positive affective connotations. Not only was English found to index status and success in society, but also *coolness*

and modernity. This perception in turn is clearly related to the consumer appeal of English. The findings indicated US entertainment culture as a fundamental source of out-of-class English language input for all participants and unequivocally suggested that the spread of and the related great vitality of English in Italy is tied to the dissemination of US cultural products, norms, and values.

In relation to research question (ii) (Do the ways students think of what English is and does reproduce an ideology of denativized, deterritorialized language and culturally neutral language?), the participants were found to discuss English language variation in the dichotomous terms of British English and American English, and in this characterization, register, and dialect coincided. Their experience in the EFL classroom, where British Standard English is set as a benchmark and learning target, on the one hand, and massive exposure to US entertainment culture, on the other, clearly shaped their characterizations of British English as a formal variety and American English as an informal, slangy variety.

Also, specific cultural references were found to be associated with the English language that contributed to both its prestige and attractiveness in the eyes of the students. Although most participants seemed to safely assume that English can be adopted as a transactional currency in cross-cultural communication, the image of English provided by the interviewees was that of a language that is loaded with culture-specific values. Even the interviewees who referred to the role of English as the lingua franca of the international academic community were found to perceive that as it is adopted as a tool for that specific function, English is nonetheless also the vehicle of culture-specific content.

6. Conclusion

This study attempted to answer two interrelated questions: (i) What are the students' perceptions of English? (ii) Do the ways students think of what English is and does reproduce an ideology of de-nativized, de-territorialized language and culturally neutral language?

In answer to (i), the analysis of the interview data found that the students regarded the English language as an important tool for social inclusion in a globalized world that attributes a utilitarian and a symbolic value to English. It can also be concluded that the ways the students who participated in this study think of English revealed a pragmatic attitude toward its spread and its concomitant function of lingua franca. ELF was accepted on pragmatic grounds also by those students who were more critical toward the idea of English making inroads in key domains of society and raised issues of inequality.

However, in answer to (ii), no suggestions were given that the students could see English as a deterritorialized, denativized, and culturally neutral language. Culture-specific norms and values were found to be associated with English, which unmistakably contributed to its prestige and, most importantly, to its attractiveness in the eyes of the students. The findings clearly suggested that the great vitality and the advancement of English in contemporary society are tied to the dissemination of US cultural products, norms, and values. Therefore, it can be arguably concluded that rather than two distinct things that coexisted in the students' perceptions, the notion of English as a lingua franca and the image of American English as the language of globalization are two sides of the same coin, and to be more specific, the former appears to be a function of the latter. In other words, it is suggested that there is a culture of English

that, although it is represented as globalized, cosmopolitan, and neutral, is deeply embedded in specific norms and values.

This contribution has mentioned the importance of looking at matters that have been a concern of applied linguistics through the lenses of a macro-sociolinguistic approach. To this end, ELF was understood as an ideological construct against which to assess the participants' perceptions of the current realities of English. From a pedagogical perspective, this study suggests that it is certainly important to raise English learners' awareness of ELF and more generally harmonize ELT practices with the current realities of English. However, it also suggests the need to address the symbolic value of English in ELT by raising students' awareness of the politics of English and its spread. Characterizations of English as a neutral language tend to overshadow issues of cultural prestige and identity. This study pointed instead to the relevance of the expressive and symbolic function of language, which was found to be a major factor in learners' motivation.

Furthermore, this study suggests a need to problematize ELF ideology and foster a critical approach to the study of English. First, ELF should be repositioned within an equitable and symmetrical multilingual-multicultural framework that respects the principles of diversity, pluralism, and equality in communication. In regard to the latter point, while the ELF principle of discarding NE norms apparently corresponds to a democratic and egalitarian ideal, the symbolic value of native-like proficiency cannot be left out of the equation. ELF communication represents a highly diversified phenomenon that includes a heterogeneous group of English speakers with divergent levels of competencies. Although NE norms may be irrelevant for ELF users in some specific real-world interactions—as opposed to classroom interactions for EFL learners—this study suggests that high proficiency in English still gives the NNEs an edge, even if only on a symbolic level. Not to mention the fact that in such formal, highly regulated contexts as academia, native-like proficiency represents a tangible advantage if not a necessity. Also, it may not be enough to merely expose students to a plurality of English varieties, as they may find the celebration of diversity and legitimization of deviations from the standard to be pointless unless non-standard forms could function as linguistic capital. Taking all this into account, and since ELF is not literally a lingua franca, it is arguably in the interest of the NNEs to increase their range of competitiveness.

To conclude, it is hoped that the findings of this study can also help ELT practitioners and English learners recognize ELF as an ideological construct and critically look at the contemporary sociolinguistic realities of English.

6.1 Limitations

Given the limited number of students involved and the non-representativeness of the sample, the findings of the present study cannot be generalized and are not conclusive. Furthermore, except for S29, all the interviewees held a favorable attitude toward English and expressed a personal interest in English language learning that extended beyond the boundaries of the EFL classroom. In this sense, a favorable bias toward English and its cultural associations may have affected the representativeness of the data. Particularly the students whose views were found to be strongly influenced by exposure to US entertainment culture could hardly be expected to conceive English as a culturally neutral language.

To reduce such bias, provide more balanced views, and enrich analysis, future studies should also involve students who hold negative affective attitudes toward

English and its learning and possibly even students who have limited exposure to US pop entertainment culture. Heterogeneous populations of non-English majors can certainly be reached, at least potentially, in any of the general and specific purposes English courses offered in Italian universities. However, as this study proves, if participation can only be on a voluntary basis, it may be difficult to motivate students to engage in discussions on a topic they lack interest in. It may thus be necessary to provide incentives, in accordance with the policy of the university where the study is conducted, as these may ease the problem of getting students to take part in the research. Researchers may also address the broad topic of students' perceptions of English in interviews or focus group studies, for instance, that ask students to offer their views on their past English learning experience and point out particularly their perceived failures and faults of ELT. It seems reasonable to assume that more students with negative attitudes toward English could be motivated to recount their learning experience, especially if this was unsatisfactory. In addition, more studies carried out in other universities and other European contexts than Italy may provide a fuller and more complex picture.

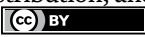
On a final note, although implications for ELT were pointed out, it must be observed that these findings are surely not of immediate pedagogical relevance. Nevertheless, they suggest that for ELF to be accepted in practice, explicit ELF instruction may not be sufficient. ELT practitioners must consider that learners may perceive their teachers' arguments for the legitimacy of non-standard and non-native usages of English as a sort of patronizing attitude, which may in turn lead to dissatisfaction and loss of motivation. On the other hand, the purpose of promoting an inclusive view of English that embraces the notion of ELF would perhaps be better served by grounding ELT practices on solid linguistic and sociolinguistic foundations. Incorporation of explicit teaching of principles of linguistics (and sociolinguistics) theory into traditional grammar instruction would possibly bring students to question standard language ideology and the native speaker ideal. They may thus be led to understand the rule-governed nature of the non-standard varieties of English and accept the legitimacy of ELF usages, while also recognizing ELF itself as an ideological construct.

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Prospects of Fulfulde as a Regional Language in a Socioculturally Heterogeneous Region in Cameroon

James N. Tasah

Abstract

This chapter addresses the possibility of selecting and raising Fulfulde as a regional language in the Far North based on the region's complex linguistic diversity. It argues that a regional language can be considered on the basis of the speakers' linguistic perceptions. Data was obtained through a 12-item questionnaire administered to a random selection of 215 respondents from some localities of the region. The results revealed that the majority 170 (79%) of the respondents preferred Fulfulde to be elevated as a regional language in the region. The different reasons provided following the analysis tend to show that Fulfulde is the most geographically successful language in terms of spread in the region and in Cameroon. The study's findings are crucial to the language planning policy in Cameroon following results from other studies. Granted that Fulfulde is the preferred language for most respondents, increased efforts should be made for its empowerment and visibility alongside all the region's minority languages.

Keywords: Fulfulde, upliftment, domains, lingua franca, regional language

1. Introduction

The Far North region is one of the interesting areas for sociolinguistic research in Cameroon because of its multilingual context. Apart from English and French that are spoken by a minority of the population, other minority languages are also used. Fulfulde is the region's lingua franca that is spoken by the majority of the speakers. It is considered as the most dominant language in the region because it is used in public domains and communities as well as official radio stations for information dissemination. As the language has been spreading progressively over the years, some of the indigenes may prefer it to be their regional language instead of the respective indigenous languages due to its status, prestige and socioeconomic dominance. Within the regional constellation of languages in Cameroon, Fulfulde can be considered as the most influential trans-ethnic languages. While some use it as a first language, others use it as a second language even at the detriment of their respective mother

tongues. Without a policy to protect and develop minority languages, the majority of languages that are not effectively transmitted from parents to the younger generation may become endangered in the future.

Contrary to earlier thinking that some languages are more important than others, it is now generally accepted that all languages, their numerical strength and scope of territorial spread notwithstanding, play basically the same functions of mediating communication among their speakers (native and non-native) [1]. However, in minority settings where colonial languages still dominate, there seems to be a deliberate attempt to downgrade the status of local languages at all levels, thereby flouting the linguistic rights of their speakers. If a common language like Fulfulde is adopted to serve as lingua franca, there will be transfer of skills, new knowledge to the speakers, and other vital information to a large majority of the population but to the exclusion of others who do not understand nor speak Fulfulde.

2. Background of study

A language like Fulfulde has spread because it developed throughout the region, and eventually attracted a significant number of people from different minority languages who use it for different social and communicative purposes. A similar point has been made by Mufwene [2], who argues that language spread is likened to parasitic species in biology where their lives depend largely on the social practices of their hosts and makers (speakers). Thus, because they involve social mechanisms, the causes of language spread are diverse, although they all stem from the contact between people speaking different languages.

Many Cameroonian languages remained at the oral stage for long, but then, many were able to make the transition to the written stage. When some languages are only used orally in a multilingual context, progressive language shift marked by the disruption of intergenerational language transmission and reduction of domains of use may begin; and this may lead gradually to the preference of the language that is spoken by the majority of the people at the detriment of others. This is the case with Fulfulde that occupies a special position in the linguistic landscape of the Far North.

Linguistically, the language has been developed more than others in the region and since this study seeks to argue for the regionalization of Fulfulde, it is important to look at some characteristics of dominant and minority languages. What are the main characteristics of dominant and minority languages? Chumbow [3] characterizes dominant versus minority languages in terms of power, prestige, status, function, domain, and population:

- Power refers to dominant languages that are powerful as a result of the cumulative impact of the functions they assume and the domains they occupy and monopolies (domains that have economic advantages, social prestige, and/or political power), while minority languages are powerless because of the limitations in their functional loads and domains of usage.
- Prestige means esteem and correlates with status, in the sense that a language with a high status has high prestige and esteem and vice versa.
- Status distinguishes between minority languages with low status and (a dominant or official language) with a high or higher status. Chumbow [3] maintains

that while status is conferred by the functional load of the language, determined by the number, type, and quality or value of functions acquired by or allocated to the language in the nation or state, function refers to the uses to which a language is put in the service of the nation. It may vary in type and perceived quality.

Sociolinguistically, minority languages to Batibo [4] are not only by their relative demographic inferiority but also, and more so, by its limited functions. In fact, it is their marginalization and exclusion from serving in secondary domains (that is, public functions) as well as having no social status or prestige, that most characterize them as minority languages. It has been used by the majority over the years since it is the most widely spoken as a national language. Fulfulde significantly enhances regional unity given that it transcends most religious, educational ethnic and regional boundaries. This chapter argues for the possibility of raising and adopting Fulfulde as a regional language because it carries the ecology and identity of most Cameroonian Northerners. It explores the prospects and possibilities of uplifting Fulfulde as a regional language in a socioculturally heterogeneous region as an attempt to contribute to the language policy options in Cameroon. The study seeks to find out whether Fulfulde is gradually becoming a regional language in the Far North. It posits that a regional language for the Far North can only be made on the basis of linguistic perceptions and attitudes of the speakers no matter its prestige and status.

2.1 Statement of the problem

One of the most difficult language planning decisions in a multilingual country in general and the region, in particular, is the choice of a common language. In a country as linguistically complex as Cameroon, choosing Fulfulde to make it regional may not be quite easy as other native speakers may diametrically oppose such an attempt. Informal observation with students in class and during conferences indicates that there is always a heated debate, for instance, when one language is proposed to be used in education to the exclusion of others particularly in Urban cities. In normal circumstances, speakers would not like to see another language raised to be used in education and other formal domains while theirs is neglected or not selected. Thus, that Batibo ([4], p. 63) maintains that no community would be prepared to abandon its language in favor of another since one's language is not only a tool for communication and a vehicle of cultural accumulation and transmission, but is also the symbol of one's identity and self-expression. Thus, it is expected that speakers of other minority languages in the Far North region that are in a weaker situation should resist the encroaching spread of Fulfulde which is in a stronger position. This can be done only if they affirm their loyalty and attachment to their languages, but this is not the case as some speakers particularly the youths not only speak Fulfulde but no longer know their respective indigenous languages. This situation has resulted in the phenomenon of language endangerment following Tasa's [5] finding that indigenous languages in Maroua were losing ground to Fulfulde. In this connection, Eastman [6] observes that once a language becomes the object of attention and people develop opinions about it such as Fulfulde for instance, it will not only be a means of communication but also a social or societal resource. If in a multilingual context, the choice for language raising can only be made based on the speakers' linguistic perceptions and attitudes of the speakers, then this study seeks to argue for the regionalization of Fulfulde according to the following questions:

- Are there some minority language speakers who find it more prestigious to acquire/learn Fulfulde instead of MTs?
- Do some indigenes of the Far North prefer Fulfulde to be uplifted as the regional language?

3. Theoretical considerations

This study uses on Fishman's ([7], p. 244) domain analysis that elaborately discusses this concept by pointing out a formal consideration of several descriptive and analytic variables which may contribute to an understanding of "*who speaks what language to whom and when.*" The theory is appropriate to this study because, through the respondents' language choices, they naturally choose and respond to interlocutors according to different parameters. The domain analysis simply refers to the person with whom the participant may be involved in an interaction. In a growing multilingual region like the Far North region with Fulfulde as the most dominant language, the respondents have several languages in their repertoire which they use in different domains. Thus, participants naturally choose a language in the course of interaction depending on the interlocutor(s), what is to be discussed, and the context of the discourse.

4. Why a regional language for the region?

In a multilingual region with a diversity of languages where the majority of the population seemingly communicates in Fulfulde, French, English as well as some of the minority languages, it is important to investigate which of the languages can likely be selected for the entire region. From informal observation, Fulfulde was obviously the most preferred for regionalization because of its prestige and social status. It is flexibly the preferred language of education, social advancement, science, technology among other domains due to the fact that it is already used to an extent by people from all walks of life in some of these domains. The language is undeniably spoken predominantly not only by the three Northern regions, but it is also the main inter-ethnic language in the Far North. Thus, it stands out as the language of intercultural communication and commercial exchange in the entire region. It can also be considered as a fully-fledged Creole with describable and systematic processes.

4.1 Factors that favor the regionalization of Fulfulde

The factors that favor Fulfulde to be considered dominant over other languages, and possibly preferred as the region's language can be attributed to urbanization, migration, prestige. Historically, none of the languages in the Far North has assumed dominance in terms of number of speakers. According to Tasah [5], Fulfulde is very crucial as a communication bridge because it links a Giziga, to a Mundang, a Gavar a Mefele, a Tchuvok, a Mofu, a Mbedam, a Buwal, a Podoko, to a Mofu, a Mafa, a Massa, and to a Tupuri, an illiterate Peul, to a literate Peul, and generally, all categories of people in the region irrespective of their educational status, linguistic background, etc. It is spoken as a first language by about 350,000 people and as a second language by 3 million people [8]. The number given by Ethnologue is 668,700 [9]. Today with approximately more than 4 million people inhabiting the entire region, the language

has a growing number of mother-tongue speakers. The demand for Fulfulde is still there, not only in the city of Maroua but also in the neighboring localities of the divisions, and it seems the language is becoming the mother tongue of hundreds of children in the region. Its spread is also attributed to some community radios that use Fulfulde in its daily broadcasts in some localities in the region. As a lingua franca over a period of several centuries, Fulfulde has often been in a situation of diglossia, spoken by individuals who speak at least French or one other language in other domains. Tasah [5] establishes that Fulfulde is gradually becoming participants' mother tongue (MT), and they considered it as a potential threat to minority languages and that minority languages were threatened more by Fulfulde than French in Maroua.

At the level of politics, multipartyism has enhanced and promoted the use of Fulfulde and this is evident as some politicians use it during their campaign to be successful in getting votes. Some health workers or agents recruited for temporary sensitization about different diseases among children and during the COVID-19 pandemic used the medium of Fulfulde to sensitize the population for preventive measures.

Socially, it is one of the dominant languages that is used by most civil servants in offices and in social media. Popular culture (such as music, drama, festivals, etc.) uses Fulfulde as the medium to reach out to the audience. It is also used in other occasions as the preferred language for interethnic communication, and widely used daily for commercial activities within the wider region.

In religious circles, Fulfulde is often used in the churches as the entire Bible has been translated into Fulfulde and liturgies are most commonly read in the language. Within the Muslim population, the language has high prestige, since it is the language of those who brought Islam to the area, and it is also used during the Friday prayer in mosques.

5. Methodology

5.1 Selection of participants

Data for this study was obtained from 215 selected respondents from different localities in the Far North region through questionnaire administration. The questionnaire was preceded by informal participant observation about the choice of language used in some proposed domains. Although there exist many domains, only eight were employed for data collection on the basis of the scope and objective of the study. It was carefully designed to elicit among other things, information from a sampled population selected from different homes in Maroua so as to investigate their language choices in different contexts with the goal of determining the participants' preferred language that can be considered regional in the Far North. They were not only from different ethnic linguistic backgrounds but also from different divisions of the region, and one of the common characteristics that govern them was their levels of bilingualism or multilingualism.

5.2 Description of participants

The subjects in this study consist of different categories of respondents of both sexes from the sampled languages used in the region. The subjects represent the ordinary citizens as they speak their mother tongues and Fulfulde in different degrees of proficiencies.

6. Data analysis

The data collected from the questionnaire items was analyzed using descriptive statistics. The questions were designed and categorized to elicit the respondents' conscious or unconscious use of language, and the results were analyzed presented below using tables. The questions were categorized so that they would be interpreted for possible generalizations. Before analyzing the use of language in the proposed domains, **Table 1** shows the respondents' linguistic backgrounds.

Languages	Respondents	Percentage
Guiziga	17	7.9%
Mofu	13	6%
Mafa	14	6.5%
Tupuri	23	10.7%
Moundang	24	11.2%
Fulfulde	54	25.1%
Sarah	17	7.9%
Massa	29	13.5%
Ngambay	10	4.7%
Musgum	14	6.5%
Total	215	100%

Table 1.
The linguistic background of the sampled respondents.

As presented in **Table 1**, the respondents were from 10 different language communities in the Far North region and the majority 54 (25.1%) were Fulfulde native speakers while the least 10 (4.7%) was Ngambay. It is already obvious that Fulfulde was the respondents' majority language was their respective MTs since some they might have acquired and adopted it as their first language (L1).

Languages	Respondents	Percentage
French	27	12.5%
Fulfulde	55	25.6%
Mother tongue	133	61.9%
Total	215	100%

Table 2.
Distribution of respondents according to languages frequently used in the family.

The results in **Table 2** also show that most 133 of the respondents (61.9%) still used their respective MTs, 55 (25.6%) used Fulfulde while 27 (12.5%) claimed to use French.

Languages	Respondents	Percentage
Fulfulde	107	49.8%
French	86	40%
Mother tongue	22	10.2%
Total	215	100%

Table 3.
Distribution of respondents according to languages frequently used in the market.

As presented in **Table 3**, many of the respondents 107 (49.8%) used Fulfulde in the market, 86 (40%) used French while 22 (10.2%) used their MTs. These results were in conformity with personal observation which revealed that Fulfulde largely dominated in commercial transaction in some markets in the region.

Languages	Respondents	Percentage
Fulfulde	58	27%
French	157	73%
Total	215	100%

Table 4.
Languages frequently used in hospitals or health centers.

As presented in **Table 4**, most of the respondents 157 (73%) claimed that they used French while 58 (27%) used Fulfulde when they were in hospitals or health centers.

Languages	Respondents	Percentage
Fulfulde	138	64.2%
French	77	35.8%
Total	215	100%

Table 5.
Distribution of respondents according to languages most used language in advertisements.

As presented in **Table 5**, the majority 138 (64.2%) of the respondents used Fulfulde against 77 (35.8%) who thought that it was French.

Languages	Respondents	Percentage
Fulfulde	47	21.9%
French	155	72.1%
English	13	6%
Total	215	100%

Table 6.
Distribution of respondents according to languages frequently used in administrative offices.

Concerning the pattern of language used in administrative offices, the results, in **Table 6**, showed that the majority 155 (72.1%) of the respondents claimed to use French, some 47 (21.9%) used Fulfulde, while very few used 13 (6%) used English. The results were quite contrary to informal observation where Fulfulde generally dominates in some administrative offices.

Languages	Respondents	Percentage
Fulfulde	108	50.3%
French	79	36.7%
Mother tongue	28	13%
Total	215	100%

Table 7.

Distribution of respondents according to languages used frequently in churches and in the mosques.

Table 7 shows that Fulfulde 108 (50.3%) was the highest followed by French 79 (36.7%) while 28 (13%) claimed to use their respective languages with respect to language use in churches and in the mosques.

Languages	Respondents	Percentage
Fulfulde	118	54.9%
French	55	25.6%
Mother tongue	42	19.5%
Total	215	100%

Table 8.

The language respondents thought was used in awareness creation against COVID-19.

As presented in **Table 8**, most of the respondents 118 (54.9%) thought that Fulfulde was used in raising public awareness against COVID-19, followed by French 55 (25.6%) while 42 (19.5%) were of the opinion that it was their mother tongues.

Languages	Respondents	Percentage
Fulfulde	145	67.5%
French	42	19.5%
Mother tongue	28	13%
Total	215	100%

Table 9.

Distribution of respondents according language most used in campaigns.

Table 9 indicates that the majority of the respondents considered Fulfulde as the most predominant language used in campaigns 145 (67.5%) followed by 42 (19.5%) French and the least was the mother tongue with 28 (13%). One of the questions sought to find out the language the participants thought could be raised to a regional language, and the results of the analyses are in **Table 10**.

Languages	Respondents	Percentage
Fulfulde	170	79%
Mother tongue	41	19.1%
Other languages	4	1.9%
Total	215	100%

Table 10.
The regional language of respondents in the Far North.

In terms of the possible language that could be uplifted in the region, a majority 170 (79%) of the respondents preferred Fulfulde, 41 (19.1%) chose their indigenous languages while 4 (1.9%) indicated other languages. By and large, more than (70%) of the respondents were of the opinion that Fulfulde should be raised as the region's language. Some of the respondents' opinion are summarized below as follows:

- The fact that living in urban areas where the native language was not regularly spoken exposed some of the participants to learn Fulfulde as their second or third language;
- Native languages did not seem to be useful in Maroua;
- Attitude and representations of city dwellers that use Fulfulde everywhere in town and the region;
- Fulfulde links different friends and people who are not from the same ethnic community;
- It enjoys widespread use in different tribes;
- It has many speakers in different regions of the country;
- It has reasonable literature written and diffused in Fulfulde;
- It is the dominant language widely spoken in the region;
- It is amenable to scientific and technological dissemination;
- It is the dominant language used in the market and those who speak Fulfulde to carry out commercial activities often bargain and buy things with a little price reduction.

It can safely be deduced from the random selection of the respondents' opinions that Fulfulde could possibly be uplifted into a regional language not only in the Far North but in the Northern region of the country where it is also widely spoken. However, as Fulfulde keeps widening and spreading in the Far North region, respondents' indigenous languages may become increasingly weakened [5]. If the other minority languages are in a weaker position because of the stronger dominance of Fulfulde that overshadows and acts as a threat to their vitality, then increased intergenerational transmission of all minority languages in families is crucial as a

benchmark for their maintenance. The growing spread of Fulfulde could also cause personal suffering in that some speakers might become linguistic “foreigners” in their respective native languages particularly those who grew up in the city of Maroua.

7. Discussion of findings

It is evident from the results of data that apart from administrative offices and hospitals where French is used frequently for services, Fulfulde largely dominates in the rest of the domains such as markets, advertisements, religion, and awareness creation about COVID-19 pandemic. The majority 170 (79%) of the respondents also preferred Fulfulde to other languages in the region. Their preference could be attributed to a number of reasons, but their main reason was that Fulfulde was the region’s widely spoken language in most domains. It is important to point out the fact that in most of the proposed domains, the respondents may prefer Fulfulde to their respective MTs because of its prestige and the ability to communicate freely with a diversity of speakers from different divisions of the region. The findings are corroborated by Chumbow [10] who pointed out that the majority (60–80%) “who do not speak the official foreign language are literally marginalized and excluded from the development equation.” It is for this reason that Fulfulde was one of the participants’ preferred languages among other choices at home, in hospitals, churches or mosques, and even with the local administration or in administrative offices etc. depending on different factors as discussed above.

Concerning the theoretical approach, Fishman’s [7] domains analysis is relevant to the data because one domain of language can be more appropriate in some contexts than in others depending on the subject matter, the respondents’ relationship with the interlocutor, the mode of communication, the context of discourse and other variables ([4], p. 43). The sociolinguistic notion of domain was formalized by Fishman [7], who stressed that different settings characteristically call for the use of different languages in a multilingual society or varieties of the same (language in a monolingual society). It is for this reason that respondents used different languages in different contexts.

From the above discussion, Fulfulde is steadily asserting its position in most domains and from our projections; it is likely going to remain as the most dominant Local Official Language (LOL) in the region. For centuries, it has enhanced trade between other language communities. During colonial times, it was instrumental in the struggle for the conquest of other tribes. Presently, it is still an important language for political, economic and social discourse in the region. Regionally, Fulfulde has been instrumental in expounding the Northern identity in Cameroon. It is increasingly becoming the language of commerce and interethnic communication. Currently, there is no division that does not house Fulfulde either as a mother tongue or a lingua franca of some of their citizens except most Tupuris from the Mayo Danai division who seem to be resisting the learning of Fulfulde. Already, as can be noted from the results of the data above, the majority of the respondents chose Fulfulde, and for this reason, it can be established that Fulfulde is indeed an authentic Cameroonian language that can be used for unity, sensitization and development of the Northern regions in general and the Far North region in particular.

However, it is important for the indigenes of the different languages to be proud of their respective MTs and also use them in different domains as much as possible. The identity of a region and its uniqueness among other regions in Cameroon is

through the use of Fulfulde alongside other minority languages. Fulfuldization may eventually contribute to a stronger sense of identity loss and the endangerment of some languages for a lack of intergenerational transmission. The dominance of the Fulfulde language in the Far North region can also relegate other indigenous language used in families naturally and other domains. This may lead to their gradual decline linguistically and culturally as well as in the identities of the different native speakers. The choice or preference of Fulfulde by the majority of the respondents implies that the use of the respective indigenous languages among the youths may continue to decrease, leading progressively to their gradual endangerment. The younger generation may also start losing their identities and intrinsic cultural virtues of their languages. Among the regionally major languages in Cameroon that can be developed, Fulfulde is suitably appropriate because of its growing number of speakers, and spread in the Far North, North and Adamawa regions. This study argued for the prospects of elevating Fulfulde as a regional language because of its dominance in the Far North, and there are prospects based on our observation that the language will become stronger and more vital in future. It is important for strategies to be taken so that Fulfulde should function harmoniously with other minority languages given that each language is useful for some functions of daily communication.

7.1 An appropriate language policy

There is a need for the adoption of an inclusive language policy for the region in particular and Cameroon in general. Such a policy, based on a clearly articulated cultural vision, should be explicit on the way languages have to be developed and treated. There is a need for due attention to be given to the empowerment of all the region's languages particularly in education and other domains for their revitalization so that Fulfulde will not swallow some and cause them to become extinct. The input of all language committee members and linguists as well as language experts in this process needs not be overemphasized. For the foreseeable future, Fulfulde is likely to gain ground all the time as it emerges as a true regional lingua franca of the Far North region. There is no gainsaying that with the present status of Fulfulde, it is the language that will have a secure future when many minority languages will be threatened by extinction; and it can be observed that even if indigenous languages receive more attention, they are unlikely to develop functions outside intra-ethnic communication like Fulfulde.

8. Conclusion


This chapter has explored the rationality of enhancing Fulfulde as a regional language through a language policy in a socioculturally heterogeneous region, and the results provide prima facie evidence that it can be raised as the region's language since it inherently binds the population together. This can be done with the spirit of adopting an inclusive language policy for the region that can enhance the development and empowerment of some of the minority languages that may be threatened by Fulfulde. However, it is important to note that when everything is said and done, the situation of indigenous languages that may be threatened in the future by Fulfulde can only be decided by some of the elites and members of each language community who need to ensure their survival and effective use alongside Fulfulde as well as imported colonial languages in the region.

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Chapter 6

Expressions of ‘Liminality’ among Post-Covid-19 Visitors to Lourdes

Mario Vassallo and Lydia Sciriha

Abstract

This study examines the extent of the applicability of Victor Turner’s ‘*communitas*’ to ‘liminality’, as experienced by pilgrims to Lourdes, a holy shrine for Christians, especially for Catholics. The study is based on empirical research conducted in multiple languages on location at the time when the Covid-19 restrictions were being lifted. A socio-linguistic approach is used to establish the value scales used by the pilgrims, using a validated instrument, the Hall-Tonna Values Inventory. The findings point out that liminal transformations need *not always* be part of communal experiences, even if they are superficially perceived to be taking part in the public sphere. The findings contribute to a further analysis of religion in modern society as perceived by Thomas Luckmann in his classic work *Invisible Religion*.

Keywords: liminality, *communitas*, pilgrimage, HT values inventory, Lourdes

1. Introduction

Since Arnold van Gennep defined the concept of liminality in his classic work *Rites de Passage* [1], the concept itself, and the tri-partite structure on which it is based, has been extensively researched in many social domains ranging from religious activities to education, from folklore to theater, from music to the study of physical space. Half a century later, Victor Turner extended the term beyond what Van Gennep had written, and in his ethnographic essay *Betwixt and Between: The Liminal Period in Rites of Passage*, he analyzed how liminality ‘...served not only to identify the importance of in-between periods, but also to understand the human reactions to liminal experiences: the way liminality shaped personality, the sudden foregrounding of agency, and the sometimes dramatic tying together of thought and experience’. One significant contribution was made by Victor Turner who extended the concept with the notion of *communitas*. During the liminal phase, individuals or groups undergo a period of transformation, temporarily stepping outside their established social structures and norms. In this state, normal hierarchies and distinctions are often dissolved, and participants experience a sense of equality and shared experience.

Turner’s original contribution suggested that a powerful sense of community and togetherness emerges during the liminal phase. This is characterized by

equality, solidarity, and collective joy among participants. Turner's *communitas* stands in contrast to structured social hierarchies and roles, representing a moment of intense social bonding that transcends the usual divisions within a society. *Communitas* is not a permanent state, but rather a transient experience that can deeply affect individuals and groups, often leading to significant personal and social transformation.

Pilgrimages are a common experience in practically all major religions.¹ A pilgrimage implies a journey to a place, a 'shrine', which is considered 'special' by a specific group because of its extraordinary importance within a particular belief system for those who engage in it. It is undertaken because of the conviction that the experience gained would give a special insight into the world-view of the 'pilgrim', which in turn leads to some kind of transformation. Pilgrimage sites are associated with abnormal events associated with the deity. Pilgrims believe that such events cannot be readily explained through reason. By visiting these sites, pilgrims believe that their visits help them to be incorporated into the aura of experiences that the visited shrines are renowned for.

Ever since Van Gennep coined the term 'liminality', the term has been extensively associated with pilgrimages. The term was initially used to describe the intermediary state in which a person undergoing a rite of passage is affected as he/she moves through the three main stages of a rite. Following Turner's work, the term liminality has been frequently applied to the experience of pilgrimages, and to describe the change in the state which visitors to shrines, generally holy, but not exclusively so, experience while visiting these shrines. In the literature, the concept of liminality is generally used to describe group experiences, jointly with the twin concept of *communitas*, implying that the change of state is normally shared by an individual with others who undergo the same experience and resonate in group activities that feed onto individual orientations.

This chapter has a very limited scope. Through concrete socio-linguistic data, it is being proposed that liminality does not necessarily reflect itself in *communitas* and that it can be actively perceived and lived, even for a brief period, by individuals who visit a shrine as individuals and not as members of a group. The discussion will also draw attention to the fact that group activities and 'rites' at these shrines are not to be perceived as necessarily reflecting *communitas*, even if a large number of persons conglomerate and 'take part in them'.

The data for this chapter is based on personal interviews with a sample of 100 persons visiting the shrine of Our Lady in Lourdes in France, a highly revered shrine among Catholics, in 2022, at the beginning of summer when the two-year-old Covid restrictions had started to be lifted. The sample collected within a week at a specified period in time cannot be interpreted to be fully representative of all the pilgrims that visit the shrine, but as a tentative illustration that pilgrimage experiences are highly differentiated and do not necessarily demonstrate the kind of communal effervescence that is at times associated with them.

¹ In this chapter, pilgrimages are being discussed only in the context of religious activity. Pilgrimages to shrines that are not associated with a specific religion do exist. Such would be the birthplace of Elvis Presley. The experience of pilgrims to these shrines is similar to that of pilgrimages to narrowly defined religious shrines, and it can obviously be understood as 'para-religious'. This is not however the object of study of the present chapter.

2. The context

The context in which this study was undertaken is important. The shrine of Lourdes is currently very different from what it was on 11 February 1858 when the first appearance of Mary, the mother of Jesus, was reported to have appeared to a young girl, Bernadette, with a very turbulent family background in what used to be a rugged cavern. At that time, farmers used to illicitly leave their cows to graze in the area. Pigs had longed grazed there. The site was a filthy place, 'covered in blood and pig hair'². The Grotto did not have a very fond name, and it was common for people to cross themselves when they pass by to fend off 'devilish spells'³. Unlike today, access to the grotto was very difficult and, in some respects, quite hazardous.

The history of the shrine is full of episodes of how difficult it was for it to establish itself the way it is now. First, the parish, then the diocese, and eventually the state took measures to prevent people from visiting it, despite the growing popularity resulting from the healings which were reported as having occurred among pilgrims visiting the grotto. By the end of 1858, the attempts to bar people from going had failed, and visiting the grotto no longer acted as a surrogate for opposition to political power⁴. It is not within the scope of this chapter to narrate even the main episodes of this discourse, but it is important to recall them to emphasize that today the place is open to all, without any interference. Lourdes is an open site, with no dress code, with no barriers between cultures, languages, or creeds. Even the sign that previously encouraged visitors to dress adequately has been removed.

Today, the River Gave de Pau which used to wind itself even inside the grotto when the appearances of Mary to Bernadette took place has been redirected to make room for a spacious, minutely planned, public space where audiences can gather for private or collective rituals. To the left of the cave, a set of churches have been built on top of each other to cater for simultaneous services. In front of them, a splendid esplanade has been devised to allow for the daily processions and mass celebrations. On one side of the esplanade, a set of buildings provide diverse religious services; on the other, a huge subterranean church was built to cater for mega audiences in excess of 25,000 persons. The grounds across the shrine itself, on the other side of a fast flowing, are now well looked after and without any more pigs and cows roaming around. Across the river, other places of worship have been constructed, simple in style but roomy enough to cater for large numbers. The baths, through which water from the little stream that started to flow during one of the apparitions, and where pilgrims traditionally allowed themselves to be immersed as a sign of spiritual rebirth, lie to the right-hand side of the shrine itself.

There is a lot of commerce outside the precincts of the shrine, where visitors can buy all kinds of mementos, but none of this takes place within the precincts of the shrine itself except for a bookshop run by the administrators of the shrine in the pilgrim's center.

² See, Laurentin [2].

³ See, Archives Cros [3].

⁴ See, Harris [4].

3. The data

Personal interviews for this study were conducted in four languages: English, French, German, and Italian among visitors to the shrine, within the precincts of the shrine itself. As many as 21 different nationalities from all over the world were captured. Interviews were conducted with nationals of Austria, Belgium, Britain, Croatia, Finland, France, Germany, Holland, India, Ireland, Italy, Malta, Madagascar, the Philippines, Poland, Portugal, Sri Lanka, Sweden, Syria, USA and Ukraine. All the interviewees were individually contacted and asked whether they could spare some minutes to be interviewed on their experience in Lourdes. No one was asked about their individual religious beliefs and there could easily have been non-Christians among the interviewees. The reference to Covid-19 is merely intended to point to a historical time when international travel restrictions were being gradually removed.

Table 1 gives data on the profile of the interviewees by age, gender, and whether they were visiting alone or in a group. It is important to note that 6% of all of the

	Total	Gender		Alone or accompanied			
		Male	Female	Alone	With family	With friends	With a group
N=	100%	27%	73%	6%	34%	21%	39%
18–25	21.0	22.2	20.5	—	14.7	28.6	25.6
26–35	8.0	11.1	6.8	—	20.6	4.8	—
36–60	33.0	37.0	31.5	66.7	23.5	33.3	35.9
61+	38.0	29.6	41.1	33.3	41.2	33.3	38.5

Base = All.

Table 1.
Sample profile.

	Total	Alone or accompanied			
		Alone	With family	With friends	With a group
N=	100%	6%	34%	21%	39%
Need For Prayer	92.0	100.0	88.2	95.2	92.3
Just came with Friends	10.0	—	8.8	9.5	12.8
As a Tourist	4.0	—	5.9	4.8	2.6
Out of Curiosity	9.0	—	—	14.3	15.4
Peaceful Atmosphere	6.0	16.7	11.8	4.8	—
To Pray for a Miracle/Healing	5.0	16.7	5.9	—	5.1
As an Act of Thanksgiving	4.0	—	5.9	—	5.1
Our Lady	6.0	—	5.9	14.3	2.6
Helping Others	2.0	—	—	—	5.1
As an Act of Faith	9.0	16.7	11.8	9.5	5.1

Base = All.

Table 2.
What enticed persons to visit Lourdes.

interviewees had come alone to Lourdes; 34% were visiting with their families; 21% were visiting with friends, and 39% were visiting with a group.

As many as 44% of those interviewed had come to Lourdes for the first time, the rest had visited more than once. When asked what had allured them to visit Lourdes, the unprompted replies varied from a purely casual interest (touristic: 4%; curiosity: 9%), through 'specifically religious' reasons (to pray for a miracle/healing: 5%; as an Act of Faith: 9%; as an Act of Thanksgiving: 4%), to the somewhat more personal needs to transcend everyday life (need for prayer: 92%; in search of a peaceful atmosphere: 6%). The data in **Table 2** does not show any special pattern in the relationship between the motivation of their visit and whether visitors to Lourdes were alone or accompanied.

When respondents were next asked to provide three words that they associated with Lourdes, four main themes emerged in their unprompted replies, respectively representing (a) personal needs (b) community; (c) relationship with the deity; and (d) structure. Data on each cluster and the main 'value' associated with it will be presented and discussed in turn.

4. The Hall-Tonna (H-T) analytical tool

The analysis of the values at the core of each of these four clusters will be broadly based on the extensive studies on which the Hall-Tonna Values Map was constructed. Through their research, Hall and Tonna identified 125 values with universally standardized definitions. Through reliability and validity studies that considered cultural, linguistic, and gender differences ([5], p. vii; [6], pp. 23–41), the 125 values were graphically distributed across a Values Map. On the basis of their studies, Hall and Tonna propose four different phases of development, namely (a) Surviving, (b) Belonging, (c) Self-initiating, and (d) Interdependence. Each of these is in turn subdivided into two stages which they respectively labeled as (a-1) safety and (a-2) security; (b-1) family and (b-2) institution; (c-1) vocation and (c-2) new order; (d-1) wisdom and (d-2) world order. Each of these is associated with a cluster of values, which are again subdivided into two: 'goals values' and 'means values'. The HT inventory is used as the framework for this study because it allows one to analyze the meta-message underlying the type of language used, and essentially to scratch beneath the surface and consequently better understand the kind of experience a visitor to Lourdes seeks, and experiences. Through this analysis, it is suggested that the sociological concept of 'liminality' can be further analyzed, in an attempt to address the issue of how diversified it could be.

In each phase, the (*-1) represents the internal or idiographic values associated with the self, while the (*-2) represents those values relating the self to the external world. The 125 values, each represented in a single term, are categorized as either goals or means values. The goal values represent states that individuals would like to achieve while the means values represent skills that assist in the achievement of the goal values.

The following data is being presented in four sections, but each section is a part of the same table, hence the enumeration **Tables 3–6**.

Using the Hall-Tonna Inventory, the main value associated with this set of reasons closely approaches 'ecority', which is located as the highest value in the values scale. Ecority is defined as the value associated with 'man's search for meaning in a world which is a mystery'. This cluster can be said to fall in Phase IV-b in the Hall-Tonna scheme: 'the world is a mystery for which we care on a global scale'. Persons in this

	Total	Gender		Age group			
		Male	Female	18–25	26–35	36–60	61+
N=	100%	27%	73%	21%	8%	33%	38%
Reflection	9.0	14.8	6.8	19.0	—	9.1	5.3
Tranquility/Peacefulness	30.0	40.7	26.0	9.5	50.0	42.4	26.3
Silence	16.0	18.5	15.1	4.8	25.0	21.2	15.8
Beauty	8.0	14.8	5.5	14.3	37.5	—	5.3
Rest/enjoyment	8.0	3.7	9.6	4.8	—	6.1	13.2

Base = All.

Table 3.

Words associated with Lourdes: Personal needs: World order, ecority.

	Total	Gender		Age group			
		Male	Female	18–25	26–35	36–60	61+
N=	100%	27%	73%	21%	8%	33%	38%
Love	14.0	14.8	13.7	14.3	12.5	12.1	15.8
Community/unity	28.0	33.3	26.0	42.9	37.5	18.2	26.3
Participation	17.0	14.8	17.8	23.8	—	18.2	15.8

Base = All.

Table 4.

Words associated with Lourdes: Community.

	Total	Gender		Age group			
		Male	Female	18–25	26–35	36–60	61+
N=	100%	27%	73%	21%	8%	33%	38%
Humility	3.0	—	4.1	4.8	12.5	—	2.6
Prayer	42.0	33.3	45.2	57.1	25.0	51.5	28.9
Devotion	3.0	—	4.1	—	12.5	3.0	2.6
Faith	17.0	11.1	19.2	14.3	37.5	6.1	23.7
Hope	9.0	11.1	8.2	9.5	—	3.0	15.8
Healing	21.0	18.5	21.9	38.1	—	21.2	15.8
Penance/forgiveness	4.0	3.7	4.1	—	—	9.1	2.6
Miracles	7.0	—	9.6	4.8	—	6.1	10.5
God/light	6.0	11.1	4.1	4.8	12.5	9.1	2.6
Sacraments	1.0	—	1.4	—	12.5	—	—
Thanksgiving	4.0	3.7	4.1	—	—	6.1	5.3

Base = All.

Table 5.

Words associated with Lourdes: Faith in a known God: Vocation; faith/risk/vision.

	Total	Gender		Age group			
		Male	Female	18–25	26–35	36–60	61+
N=	100%	27%	73%	21%	8%	33%	38%
Organization	4.0	7.4	2.7	9.5	—	—	5.3
Grotto	11.0	7.4	12.3	4.8	—	12.1	15.8
Processions	1.0	—	1.4	0.0	—	—	2.6
Bernadette	13.0	7.4	15.1	9.5	12.5	18.2	10.5
Mary/holy place	24.0	29.6	21.9	9.5	12.5	27.3	31.6

Base = All.

Table 6.

Words associated with Lourdes: institution; ritual.

category visit Lourdes not as an end in itself, but because it provides them with a vantage point, whereby they can better reflect and understand issues related to the ultimate meaning of life.

Interestingly, the gender difference in this group is not significant, except for 'tranquility/peacefulness', where males registered a much higher score (40.7%) vs. females (26%). The highest relative score was registered among persons aged 26–35, followed by persons aged 36–60 (at 50 and 42.4%, respectively). In all cases, the highest score for each term used was registered among persons aged 26–35.

The values reflected in this cluster closely follow the first one. Importantly, in the words provided by the respondents, there is no reference to any specific group, denomination, or religion, but to an openness that is holistic, and essentially communitarian. The values reflected here are 'interdependence', and 'community'. They do not have a strict reference to the transcendent connotations of the first words in the first cluster discussed above, but their incarnation is wide open, non-delineated, and based on a boundaryless sense of unity. In the HT schema, these can be said to belong to the Means Values of stage IV-a in the HT Inventory.

The word 'unity' predominates in this cluster, with males again registering a relatively higher score than females (33.3% vs. 26%). Unity was most frequently mentioned by the youngest group of participants, aged 18–25, with as much as 42.9%, closely followed by those aged 26–35 (37.5%). For those persons who mentioned these terms, Lourdes represents a place and a time where and when they can transcend their individuality and find fulfillment in some form of 'community'.

The third set of words given for visiting Lourdes are specifically faith-oriented reasons, and in many respects, clearly evocative of Christian/Catholic theology and ritual. As such, this cluster specifically referred to a 'known' God, and man's relationship with Him exhibited through clearly specified 'means', ranging from Humility to Thanksgiving and as it was enlivened by the notion of Miracles and the Sacraments. The word 'prayer' has been included in this cluster because of the way in which it was associated with Lourdes, not prayer in general (in which case it would have been better placed in the first cluster) but 'prayer to Our Lady'. In the scale provided by Hall-Tonna, this cluster appears to fit best in Phase 3: 'the world is a creative project in which I want to participate'.

In this cluster, 'prayer' was the most commonly cited word, at 42% overall. Females (at 45.2%) mentioned this more frequently than males (at 33.3%). Prayer was most frequently mentioned by persons in the youngest category, at 57.1%. For all

the participants, the gap between prayer and healing, which is the next most common word spontaneously given by respondents, is quite substantial: prayer: 42% vs. healing: 21%.

The fourth cluster of spontaneous words provided by the participants very specifically refers to the ‘physical’ aspects of Lourdes, i.e. to the organizational set-up and to the rituals that take place there. The references are clear: the Grotto, the Processions, and Mary/Holy Place are the embodiment of what Lourdes immediately represents to an outsider. Those who gave these words as the ones they spontaneously associated with the shrine clearly wanted to signify that their visit was anchored to a particular place in space. It is not easy to associate the values emanating from this cluster to those listed in the HT inventory, except that the concreteness of what they mention evokes values that are present in both phases 1-b and 2-b of that inventory. Visiting Lourdes appears to be a means to come in contact with very specific icons and to participate in very specific rituals. It is as it were, a search for ‘safety’ and ‘security’ provided by the knowledge that one has actively participated in actions that are officially sanctioned.

The different orientations reflected in the four clusters that were spontaneously given by participants in this study point to the possibility of different types of liminal experiences consequent to their Lourdes visit. But before discussing further this issue, it is interesting to note that when asked to mention three different words that they associate with Lourdes, the same cluster formation surfaces.

Lourdes is renowned for its daily routine: the day starts with several Masses at the Grotto and in the other chapels, continues with processions, the blessing of the sick, and the evening aux flambeaux. Visitors also flock to the baths for the ‘water gesture’ (as it is now called since immersion has been replaced by a much simpler ritual following the onset of Covid-19), many follow the Stations of the Cross either up on the nearby hill or on flat ground within the shrine’s precincts, or they can engage in private prayer. The Rosary is recited many times during the day in different languages and is at the core of many of the formal rites, such as the blessing of the sick and the evening aux flambeaux procession. **Table 7** summarizes what the participants stated that they enjoy most while at Lourdes, grouped in the same sequence as **Tables 3–6**. Their replies allow for a consistency check between the main reason why different clusters of persons visit Lourdes and the activities which they declared that they enjoy participating in. It is important to note that participants were allowed to list more than one activity in their replies, hence the total adds up to more than 100%.

The percentages in **Table 7** are row percentages based on the total number of times a particular activity was mentioned. Thus, for example, seven participants out of the nine who gave the word ‘reflection’ stated that they enjoy participating in Mass. This translates into 77.8%.

What transpires from this Table is that the celebration of Mass (the most important rite for Catholics and other Christian denominations) attracts the highest number of persons, irrespective of the cluster, as reflected in the words participants in this study spontaneously associated with Lourdes. Even so, the fact that 100% is only registered in the third and fourth clusters is significant, given that the celebration of Mass is considered to be the most important function in the Christian liturgy as a whole and at Lourdes in particular.

In general, however, the data suggests that all the formal daily activities that take place exercise an attraction to practically all the pilgrims to Lourdes, though not in equal measure. The question that naturally arises is whether Lourdes is actually providing enough space for those who go there in search of values associated with the first cluster. This study does not have enough data to answer this question. But the

	Total	Mass	Rosary	Private prayer	Candlelight procession	Water gesture	Stations of the cross
N =	(N = 100) 100%	84	51	35	65	35	35
<i>Ecorty</i>							
Reflection	(N = 9) 100%	77.8	33.3	33.3	66.7	55.6	55.6
Tranquility/peacefulness	(N = 30) 100%	93.3	46.7	36.7	76.7	30.0	36.7
Silence	(N = 16) 100%	93.8	50.0	31.3	81.3	18.8	43.8
Beauty	(N = 8) 100%	87.5	62.5	25.0	62.5	37.5	25.0
Rest/enjoyment	(N = 8) 100%	87.5	62.5	37.5	87.5	50.0	12.5
<i>Community/unity</i>							
Love	(N = 14) 100%	85.7	42.9	42.9	71.4	42.9	35.7
Community/unity	(N = 28) 100%	82.1	50.0	35.7	60.7	28.6	53.6
Participation	(N = 17) 100%	88.2	52.9	29.4	47.1	35.3	58.8
<i>Faith</i>							
Humility	(N = 3) 100%	100.0	33.3	33.3	33.3	33.3	33.3
Prayer	(N = 42) 100%	83.3	57.1	40.5	64.3	35.7	31.0
Devotion	(N = 3) 100%	100.0	33.3	—	66.7	—	33.3
Faith	(N = 17) 100%	76.5	52.9	35.3	52.9	29.4	23.5
Hope	(N = 9) 100%	88.9	66.7	33.3	88.9	55.6	11.1
Miracles	(N = 7) 100%	57.1	28.6	—	71.4	28.6	85.7
God/light	(N = 6) 100%	100.0	83.3	50.0	50.0	—	—
Thanksgiving	(N = 4) 100%	100.0	100.0	50.0	50.0	50.0	—
<i>Institution</i>							
Organization	(N = 4) 100%	75.0	0.0	50.0	100.0	25.0	50.0
Mary/holy place	(N = 24) 100%	83.3	45.8	37.5	62.5	33.3	20.8

	Total	Mass	Rosary	Private prayer	Candlelight procession	Water gesture	Stations of the cross
Healing	(N = 21) 100%	17	11	5	13	12	6
Grotto	(N = 11) 100%	72.7	63.6	54.5	54.5	36.4	27.3
Processions	(N = 1) 100%	100.0	100.0	—	—	100.0	100.0
Penance/forgiveness	(N = 4) 100%	100.0	50.0	50.0	25.0	25.0	75.0
Sacraments	(N = 1) 100%	100.0	100.0	100.0	—	—	—
Bernadette	(N = 13) 100%	61.5	30.8	23.1	76.9	30.8	23.1

Base = All.

Table 7. Words most commonly associated with Lourdes by activities enjoyed most.

data clearly shows that the formal program provides ample space for those in the other clusters.

5. Discussion and conclusion

This sociology of religion is replete with studies that document different orientations to the deity, and how these different orientations are in turn reflected in religious structures. Through an analysis of the language used, this study sought to explore whether the pilgrimage phenomenon necessarily manifests itself in *communitas*, as suggested by Turner, or whether a multiplicity of forms of liminality can co-exist among persons who are essentially taking part in the same experience.

The purely linguistic analysis of the spontaneous reasons given by visitors of why they take the trouble to visit Lourdes, along with the words that they spontaneously associate with the place, clearly indicates that different persons go on to Lourdes for very diverse reasons: some go to confirm their strong beliefs and practices associated with the cult of the Virgin Mary. Others go there hoping to be blessed, like others before them, with the miraculous mantle of Lourdes, in search of healing for themselves or for their loved ones. Yet others go to Lourdes in search of meaning, tranquility, silence, beauty, in other words in search of a deeper understanding of life and its ultimate meaning.

To start with, contemporary pilgrimages to Lourdes do not exhibit the kind of effervescence and elation that is documented when Lourdes's fame became widely disseminated despite the efforts of the State then intended to suffocate it. As such, the wide manifestation of *communitas* present in the early years of Lourdes' popularization is certainly absent. Contemporary Lourdes is no longer a 'political experience' as it was in its early days, and as such, the protest element that could readily have contributed to the development of *communitas* is no longer present⁵.

In the course of conducting the personal interviews that constitute the corpus for this limited study, the perception that the experience of liminality was not homogeneous could be easily perceived, and the experience of *communitas* as an essential ingredient was largely absent. Even in the activities that attract the largest numbers of those present in Lourdes at a particular point in time (mainly the evening *aux flambeaux* procession and the blessings of the sick), deep feelings of *communitas* did not transpire in the linguistic terms used by the participants to describe their experience.

What is quite striking from the current set of data is that, whatever the personal orientation of the visitors, participating at Mass is something that appears to meet the objectives of all the pilgrims. The Catholic Mass is a very structured ritual but it can effectively serve to satisfy the needs and inclinations of a wide diversity of religious orientations. The sequence of the various stages of this rite explains why this is so: the celebrant first leads the audience to engage in a sequence of stages: reflection, praise,

⁵ Within the confines of the shrine itself, discrimination or any sign of 'protest' is completely absent. Signage is minimal and exclusively religious-related; there is no specific dress code, and no prohibitions as can be seen at the entrance of many holy places all over the world. If any positive discrimination exists, it is to facilitate the plight of the many sick pilgrims who are taken there, often transported in special carriages to participate in the special ceremonies organized for them. Otherwise, Lourdes is a welcoming place which different groups and individuals visit. As such, formal instrumentality by the organizers is completely absent, and different visitors get what they look for in different, unstructured ways.

listening, celebration, and thanksgiving. As is evident from the replies of the participants in this study, persons with different needs can focus on themselves and draw what they seek most. For small homogeneous groups within the larger Mass audience, the experience of *communitas* frequently develops, even if not ‘loudly’ manifested, but for most, the Mass remains an individual religious experience devoid of the basic ingredients of *communitas* as described Turner.

Though limited by its very nature, the data presented in this study clearly suggests that liminality is not to be necessarily understood as a narrow, analytically homogeneous concept, with *communitas* as an essential component involving all those who happen to be taking part in the same ritual. Conversely, one can accept that liminality can be a widely differentiated experience. The socio-linguistic data analyzed through the HT Values Inventory in this study clearly points away from a necessary homogeneous understanding of the liminality process, and consequently of the transformative effects of pilgrimages on people’s lives when the pilgrimage is over and normal life returns.

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Section 3

Discourse Analysis and Genre
Studies in Academic Contexts

Chapter 7

A Genre-Based Study on Disciplinary Rhetorical Structures in Research Articles

Xianqing Luo

Abstract

The research articles (RA), recognized as a prestigious genre, serve as a primary arena for the dissemination of knowledge and the establishment of academic reputation. Consequently, the analysis of RA structures has garnered substantial attention from scholars, particularly within the fields of discourse analysis and English for Academic Purposes (EAP). Previous studies have revealed significant interdisciplinary and intra-disciplinary differences in the organization of RAs, underscoring the complexity and diversity inherent in academic writing. This chapter reviews these findings and offers insights into the distinct rhetorical structures that characterize RAs in different disciplines. By elucidating these variations, the chapter aims to provide practical guidance for both researchers and educators in refining EAP instruction. Such understanding is pivotal in developing instructional materials that are more attuned to the specific needs of students and novice writers, thereby enhancing their generic awareness and enabling them to better conform to the conventions of academic writing within their respective fields. Ultimately, this chapter contributes to the ongoing discourse on genre-based approaches to EAP, with implications for improving the quality and efficacy of academic communication.

Keywords: genre-based study, rhetorical structures, research article writing, disciplinary variations, pedagogical implications

1. Introduction

Academic scholars and postgraduate students across the world are often expected to write and publish scientific papers in English so as to achieve professional advancement. However, many novice academic writers in different disciplines often encounter difficulties in comprehending research reports published in established journals and presenting their own reports in ways that meet the expectations of expert writers in their respective academic research communities [1–4]. In this regard, the substantial body of research in the field of genre analysis [1, 3–13] appears to have provided a great deal of information about how writers present their reports using disciplinary conventional rhetorical structures and linguistic strategies in different sections of research articles. Genre analysis frameworks offer a systematic approach to

examining the structure and communicative functions of texts, particularly research articles (RAs). Swales [3] introduced a seminal 3-move model that has been instrumental in analyzing the structure of RA introductions. This model outlines three rhetorical moves: Move 1 (“establishing a territory”), which typically involves claims of centrality, topic generalizations, and reviews of prior research; Move 2 (“establishing a niche”), where authors signal gaps, raise questions, or continue a research tradition; and Move 3 (“occupying a niche”), where the authors present their own research. Notably, Move 2 in Swales’ original framework offered four distinct strategies: counter-claiming, indicating a gap, raising questions, or continuing a tradition ([3], p. 141). Despite the widespread application of Swales’ Create a Research Space (CaRS) model in analyzing introductory sections of research articles, Swales [4] later revised this framework in response to deviations observed in empirical studies. In the revised CaRS model, the first move (“establishing a territory”) continues to focus on reviewing existing research and claiming centrality in the field. Move 2 (“establishing a niche”) now includes strategies such as identifying a research gap, contributing to an existing body of knowledge, following a research trend, or presenting a justification for the research based on real-world problems. Move 3 (“presenting the present work”) expands on the authors’ own study by outlining the research objectives, research questions, the value of the study, and the overall structure of the paper. Swales’ CaRS model remains a fundamental tool for analyzing the rhetorical moves in research article introductions, helping scholars to systematically deconstruct the rhetorical strategies used by authors. In the field of discourse analysis, rhetorical or generic structure refers to the organization of texts to fulfill specific communicative purposes, typically through a series of “moves” and “steps.” A move is a functional unit of discourse aimed at achieving a particular communicative goal, while a step is a sub-unit that supports the move by providing elaboration or specific details. For example, in research articles, common moves include introducing the topic, reviewing the literature, describing the methodology, and discussing results. Within the introduction move, a step may involve providing background information, defining key terms, or identifying a research gap. Swales’ [3] CaRS model remains an essential framework for understanding how these moves and steps operate in academic writing, particularly in research article introductions. This chapter is devoted to review the generic structures employed by expert writers in data-based empirical research articles in that such information can be used to help novice writers acquire related genre knowledge needed to meet the expectations of their relevant academic discourse community.

2. Rhetorical structures and linguistic resources in research article in different disciplines

2.1 Rhetorical structures of research article in applied linguistics

Among the extensive body of genre-based study on research articles, Yang and Allison’s [14] research article titled *Research Articles in Applied Linguistics: Structures from a Functional Perspective* presents an in-depth genre analysis of the macro-structures of research articles in applied linguistics. This study explores the functional organization of these articles, offering insights into how they deviate from or conform to the traditional Introduction-Method-Results-Discussion (IMRD) structure. The paper emphasizes the significance of genre knowledge in academic writing,

particularly in helping learners and researchers comprehend and produce specialized discourse. The authors situate their study within the tradition of English for Specific Purposes (ESP) genre analysis, which emphasizes the role of text organization in achieving communicative purposes. They also acknowledge the complementary approaches from new rhetoric studies and systemic functional linguistics, but their focus remains on the functional perspective within the ESP framework. Previous research on genre analysis has largely focused on the structure of RAs in science and engineering, with less emphasis on the social sciences, including applied linguistics, and therefore this study aims to fill this gap by providing a detailed analysis of the macro-structural organization of RAs in applied linguistics, highlighting both the commonalities and variations within this genre.

The study draws on a corpus of 40 RAs randomly selected from four leading journals in applied linguistics: *Applied Linguistics*, *TESOL Quarterly*, *English for Specific Purposes*, and *English-Language Teaching Journal*. The researchers employed a stratified random sampling strategy to select 10 RAs from each journal, resulting in a total corpus of 40 articles. These articles were categorized into primary and secondary research based on their content. Primary RAs are those that report original empirical research, while secondary RAs review and synthesize existing research. The authors followed a qualitative approach to analyze the macro-structures of these articles, using the IMRD framework as a reference point for primary RAs. For secondary RAs, they developed a new framework, consisting of Introduction-Argumentation-Conclusion, to account for their distinctive structure.

2.1.1 Macro-structure of primary research articles

The analysis revealed that the relatively prevalent IMRD structure is not universally adopted in primary RAs in applied linguistics. All primary RAs in the corpus included sections for Introduction, Method, and Results, but there was variation in the way these sections were realized. For example, some articles included additional sections such as Theoretical Basis, Literature Review, and Research Questions, which were positioned between the Introduction and Method sections. This suggests that applied linguistics RAs often require a more nuanced structure to accommodate the complexity of the research being reported. The study found that the journal *Applied Linguistics* showed a tendency to include a separate Theoretical Basis section in its primary RAs, reflecting the journal's emphasis on theoretical discussions. Similarly, *TESOL Quarterly* often included a separate Literature Review section, which sometimes assumed more importance than the Introduction itself. This indicates a strong emphasis on grounding research within the existing literature, a feature that may be particularly important in fields where theoretical consensus is less established. In contrast, primary RAs in *English for Specific Purposes* adhered more closely to the traditional IMRD structure, although they occasionally included additional sections such as Pedagogic Implications. This reflects the journal's focus on practical applications of research findings in educational settings. The *English-Language Teaching Journal* displayed a simpler macro-structure, typically following an IMRC (Introduction-Method-Results-Conclusion) format, with occasional sections on Pedagogic Implications, emphasizing its focus on language teaching practice. One of the key findings of the study is that the use of section headings in applied linguistics RAs is not always straightforward. The authors note that while the IMRD framework is a useful reference, it cannot be imposed rigidly on all articles. Some RAs use unconventional section headings that do not clearly indicate their rhetorical function,

which can make it challenging to analyze their macro-structure. For instance, the authors cite an example from the *ELT Journal*, where an article's Introduction section was divided into multiple subsections, making it difficult to determine where the Introduction ended and the Method section began.

2.1.2 Macro-structure of secondary research articles

Secondary RAs, which review and synthesize existing research, exhibited a different macro-structure compared to primary RAs. The authors proposed a new framework for analyzing these articles, consisting of three main sections: Introduction, Argumentation, and Conclusion. The Introduction in secondary RAs typically sets the stage by discussing the significance of the topic and reviewing relevant literature. The Argumentation section is the core of the article, where the authors develop their argument, often organized around specific themes or issues. The conclusion summarizes the main points and may offer suggestions for future research or implications for practice. The study found that secondary RAs in *Applied Linguistics* and *TESOL Quarterly* often included optional sections such as Theoretical Basis or Pedagogic Implications, depending on the focus of the article. These sections were positioned either before or after the Argumentation section, serving as transitional elements that linked the review of existing literature with the authors' arguments or conclusions. One of the challenges in analyzing the macro-structure of secondary RAs was determining the boundaries between the Introduction and Argumentation sections. The authors note that in some cases, the Introduction seemed to blend into the Argumentation, making it difficult to delineate where one section ended and the other began. This was particularly evident in articles where the Introduction included extensive literature reviews or theoretical discussions that laid the groundwork for the subsequent argumentation. The study also identified three subtypes of secondary RAs based on their overall purpose: theory-oriented, pedagogy-oriented, and application-oriented. These subtypes corresponded to different patterns of organization within the Argumentation section. Theory-oriented RAs tended to follow a point-by-point structure, where the authors developed their argument through a series of sub-arguments. Pedagogy-oriented RAs often followed a problem-solution pattern, reflecting their focus on addressing practical issues in language teaching. Application-oriented RAs typically followed a problem-solution-demonstration pattern, where the authors presented a solution to a problem and then demonstrated its effectiveness through examples or case studies.

2.1.3 Summary

Yang and Allison's study provides a comprehensive analysis of the macro-structural organization of RAs in applied linguistics, highlighting both the diversity and complexity of this genre. The findings suggest that while the IMRD framework remains a useful reference for analyzing primary RAs, it does not fully capture the range of organizational patterns found in applied linguistics articles. The study also demonstrates the need for a more flexible approach to analyzing secondary RAs, which often require a different organizational framework. The authors conclude that understanding the macro-structure of RAs in applied linguistics requires careful consideration of the rhetorical functions of each section, as well as the specific context in which the article was written. They emphasize the importance of genre analysis in helping researchers and educators better understand the conventions of academic writing in applied linguistics,

which can ultimately contribute to more effective teaching and learning of academic writing in this field. Overall, this study makes a significant contribution to the field of genre analysis by providing a detailed account of the macro-structural patterns in RAs in applied linguistics. It also highlights the need for further research on the internal organization of these articles, particularly in relation to how authors structure their arguments and present their findings. By offering a nuanced understanding of the macro-structural organization of RAs, this study provides valuable insights for both researchers and practitioners in the field of applied linguistics.

2.2 Rhetorical structures of research articles in law

The research article *Generic Structure and Rhetorical Moves in English-Language Empirical Law Research Articles: Sites of Interdisciplinary and Interdiscursive Cross-over* by Tessuto [15] explores the genre and discourse patterns in empirical law research articles. The study examines how these articles are structured, focusing on the interplay between interdisciplinary and interdiscursive influences that shape the writing of legal research within the broader framework of scientific discourse. The paper begins by contextualizing the significance of research articles within scientific discourse, emphasizing their role as a critical medium for knowledge exchange among scholars. Tessuto argues that empirical law research articles, particularly those published in high-impact English-language journals, have increasingly shifted from traditional theoretical approaches to more empirical methodologies, reflecting a broader trend toward interdisciplinary research in legal studies. This shift, the author notes, is evident in the structural organization of these articles, which often adhere to the IMRD (Introduction, Method, Results, Discussion) framework common in scientific research, albeit with notable variations and adaptations specific to the legal field. The study is situated within the broader framework of genre analysis, drawing on concepts from English for Specific Purposes and Systemic Functional Linguistics to investigate how legal research articles are constructed to fulfill their communicative purposes. Tessuto's analysis aims to uncover the generic structure of these articles, identify the rhetorical moves that define their organization, and explore the role of interdisciplinarity and interdiscursivity in shaping their content and form.

Tessuto's study is based on a corpus of 90 empirical law research articles published between 2010 and 2012 in three leading journals: *Journal of Empirical Legal Studies*, *Law & Social Inquiry*, and *Law & Society Review*. These journals were selected for their interdisciplinary focus and their prominence in disseminating empirical legal scholarship. The corpus was analyzed using a combination of qualitative and quantitative methods, with the aim of identifying the generic structure of the articles and the specific rhetorical moves employed by the authors. The analysis focused on the IMRD framework, examining how it is applied and adapted in the context of legal research. In addition to the IMRD structure, Tessuto also considered other organizational elements, such as Background Review and Conclusion sections, which often play a significant role in empirical law articles. The study also explored the linguistic and rhetorical strategies used in these sections, with a particular emphasis on the ways in which legal writers integrate interdisciplinary perspectives into their work.

2.2.1 Macro-structures of research articles in law

The study found that while the IMRD framework is a common feature of empirical law research articles, it is often adapted to meet the specific needs of the legal

discipline. For example, the Background Review section, which is not a standard component of the IMRD structure, was present in the majority of the articles analyzed. This section typically provided a detailed review of the literature, establishing the context for the research and identifying gaps that the study aimed to address. Tessuto argues that the inclusion of a Background Review section reflects the interdisciplinary nature of empirical legal research, which often requires a broader contextual understanding of the issues being studied. The Conclusion section also varied significantly across the corpus. While some articles adhered to the traditional IMRD structure by incorporating conclusions into the Discussion section, others featured a standalone Conclusion section that provided a summary of the findings, evaluated the study, and offered suggestions for future research. Tessuto notes that this variation reflects the evolving nature of legal research, which increasingly values the practical implications of research findings and their relevance to broader social and legal contexts.

2.2.2 Rhetorical moves of research articles in law

Tessuto identified a total of 25 rhetorical moves across the different sections of the articles, with some moves being more common and obligatory than others. In the Abstract, for example, the most frequent moves were those that stated the purpose of the study, identified the methodology, presented the findings, and offered concluding remarks. These moves were found in nearly all of the abstracts analyzed, highlighting their importance in summarizing the key aspects of the research. In the Introduction section, the most common moves involved establishing the territory by providing a general overview of the research topic, establishing a niche by identifying gaps in the literature and presenting the present work by outlining the research questions and methodology. Tessuto observed that while these moves are consistent with Swales' CaRS (Create A Research Space) model, their realization in legal research articles often involved a more detailed review of the literature and a stronger emphasis on the theoretical and methodological framework of the study. The Background Review section, where present, typically involved moves that established the territory, identified gaps in the literature, and described the study's contribution to the field. Tessuto notes that this section often served as an extension of the Introduction, providing a more comprehensive review of the literature and a detailed justification for the research. The Method section, meanwhile, was characterized by moves that introduced the research method, described the data collection and analysis procedures, and provided an overview of the study's design. In the Results section, the most common moves involved stating key findings and commenting on their significance. Tessuto observed that these moves were often accompanied by detailed statistical analyses, reflecting the empirical nature of the research. The Discussion section, on the other hand, typically involved moves that reinforced the findings, provided background knowledge, and drew conclusions from the research. The use of evaluative language and modal verbs was common in this section, indicating the authors' interpretations of their findings and their implications for future research.

2.2.3 Interdisciplinarity and interdiscursivity of research articles in law

One of the central contributions of Tessuto's study is its examination of the influence of interdisciplinarity and interdiscursivity on the structure and content of empirical legal research articles. Tessuto emphasizes that legal research writing is not confined to traditional legal rhetoric but is increasingly shaped by interdisciplinary

influences from the social sciences, humanities, and even technical disciplines. These cross-disciplinary forces inform how legal arguments are constructed, how evidence is marshaled, and how conclusions are articulated. Specifically, Tessuto highlights that interdisciplinary engagements influence rhetorical decisions by incorporating frameworks and methodologies from other fields. For instance, legal scholarship often integrates empirical research methods from the social sciences, resulting in a shift from a purely argumentative discourse to one that is more evidence-based. This necessitates the adoption of rhetorical strategies more common in scientific writing, such as the IMRD structure (Introduction, Methods, Results, and Discussion). Tessuto argues that the integration of interdisciplinary perspectives is a defining characteristic of empirical legal research articles, as legal scholars increasingly draw upon methodologies, theories, and data from other social sciences to enrich their analysis. This interdisciplinary orientation is especially evident in the structure of the articles, notably in the Background Review and Methodology sections, where authors frequently engage with literature and research practices from fields such as sociology, economics, and political science. Interdiscursivity—the blending of discourse conventions from different academic domains—further underpins this phenomenon. Tessuto notes that legal writers increasingly adopt elements of scientific discourse, such as the IMRD structure and the application of statistical analysis, to present their findings. However, he observes that these conventions are often adapted to suit the particular demands of legal research, resulting in a hybrid discourse that merges both legal and scientific writing practices. The epistemological and cultural factors driving these interdisciplinary variations reflect the differing ways in which various fields validate knowledge claims. In law, where justification traditionally relies on precedents and logical reasoning, the incorporation of empirical research introduces new modes of argumentation, blending rhetorical persuasion with data-driven analysis. Tessuto further contends that these shifts in legal discourse are symptomatic of broader cultural movements toward interdisciplinary research, driven by globalization and the growing complexity of legal issues that necessitate multifaceted approaches. Ultimately, the variations in rhetorical structures within legal research articles are not merely stylistic but are deeply informed by interdisciplinary influences and the distinct epistemological foundations of the contributing disciplines. This confluence of academic discourses positions law as a dynamic site for the interaction of diverse intellectual traditions.

2.2.4 Summary

Tessuto's study provides a comprehensive analysis of the generic structure and rhetorical moves in empirical law research articles, highlighting the ways in which these articles are shaped by interdisciplinary and interdiscursive influences. The findings suggest that while the IMRD framework remains a useful reference for organizing empirical research, it is often adapted in the context of legal research to accommodate the specific needs and goals of the discipline. The study also underscores the importance of understanding the role of interdisciplinarity and interdiscursivity in shaping academic discourse, particularly in fields like law that are increasingly engaging with other disciplines. By exploring how legal scholars integrate and adapt the conventions of scientific discourse, Tessuto's study offers valuable insights into the evolving nature of legal research and the ways in which it contributes to the broader scientific community. Overall, this research contributes to the field of genre analysis by providing a detailed account of the structure and content of empirical law research articles. It

also offers practical implications for educators and researchers in the field, suggesting that a deeper understanding of the generic and rhetorical conventions of empirical legal research can enhance the effectiveness of academic writing and contribute to the development of more sophisticated and interdisciplinary research practices.

2.3 Rhetorical structures of research articles in energy engineering

Ye [16] explores the generic structures and rhetorical strategies employed by Chinese expert writers in energy engineering research articles. This paper sets the context by discussing the increasing competition among Chinese universities to improve their global rankings, which has led to heightened pressure on graduate students to publish their research in high-impact international journals. However, the traditional focus of English courses on general communicative abilities has left students underprepared for the specific challenges of academic writing required for publishing RAs. This gap has prompted a growing demand for EAP courses that address these specific needs, sparking a debate among English-language teachers in China regarding the relative merits of English for General Purposes (EGP) versus EAP. In response to this debate, some educators have focused on identifying the problems in Chinese students' academic writing and proposing course design suggestions. However, there has been limited interaction between subject specialists and English teachers in China to address the challenges faced by novice researchers in writing RAs. To bridge this gap, the study examines whether the RAs written by Chinese expert writers adhere to the established conventions of international scientific communities, thereby justifying their potential role in supporting novice researchers. The study is also motivated by the pedagogical concern of whether non-native English-speaking writers in China can effectively instruct students in overcoming difficulties associated with publishing RAs in international journals. By analyzing the macro-structure and rhetorical moves of these RAs, the study aims to determine the extent to which Chinese expert writers conform to international scientific conventions and the implications of these findings for English for Academic Purposes practitioners. The study utilizes a self-compiled corpus of representative energy engineering RAs published by authors on Elsevier's 2016 list of "most cited Chinese researchers." The selected journals include *Nano Energy*, *Applied Energy*, *Journal of Energy Sources*, and *Energy*. The corpus includes 74 RAs, with articles selected based on their publication in high-impact journals and their authorship by recognized experts in the field. The analysis focuses on the macro-structural patterns and rhetorical moves within these RAs.

2.3.1 Macro-structure of energy engineering RAs

The analysis reveals that 86% of the RAs in the corpus adhere to the IM[RD]C macro-structure, a variant of the standard IMRD (Introduction, Methods, Results, Discussion) structure, with some texts incorporating additional sections such as Theory (T) or Experimental (E). This finding aligns with previous research indicating that the IMRD structure is a common pattern in scientific writing, although the exact IMRD structure was not found in any of the texts, likely due to the merging of the Results and Discussion sections into a single [RD] section in most cases. When the Theory and Experimental sections are considered independently, the most frequently used macro-structure is IE[RD]C, occurring in 62% of the texts. This suggests a preference among energy engineering researchers for an inductive research approach, where experiments are conducted to gather data that is later analyzed to draw

conclusions. The IM[RD]C pattern accounts for 16% of the texts, while the IT[RD]C pattern, where a theoretical model is developed and then tested through experiments, is found in 8% of the texts.

2.3.2 Rhetorical moves of energy engineering RAs

The study identifies a total of 12 rhetorical moves across the various sections of the RAs, with nine of these moves being classified as obligatory, meaning they appear in 100% of the texts. The frequency and distribution of these moves are highly consistent with findings from previous studies on science and engineering RAs, indicating that Chinese expert writers rigorously follow the established conventions of international scientific communities. In the Introduction section, three moves are identified as obligatory: establishing a territory (M1), establishing a niche (M2), and presenting the present work (M3). The M1 move involves steps such as stating the importance of the topic, identifying challenges or problems, and reviewing previous studies. M2 involves steps like revealing limitations in previous research, highlighting insufficiencies, indicating a research gap, and presenting positive justification for the study. The M3 move includes announcing the purposes of the research, briefing the research method, announcing principal outcomes, and evaluating the outcomes. Notably, the step of presenting positive justification (M2S4) is classified as quasi-obligatory, occurring in 68% of the texts. This finding suggests that Chinese authors may have a preference for using positive language to justify their research, which could be influenced by cultural or disciplinary factors. The “Methods” section includes three primary moves: developing a theoretical model (M4), describing experiments (M5), and describing data analysis procedures (M6). The M4 and M5 moves are classified as quasi-obligatory, indicating that RAs may fall into two broad types: those that take a deductive approach, starting with a theoretical model, and those that take an inductive approach, starting with experiments. The M6 move, which involves providing data sources, describing numerical analysis methods, and briefing performance assessment methods, is obligatory. In the Results and Discussion section, three moves are identified: reporting results (M7), commenting on the results (M8), and evaluating the results (M9). These moves exhibit a cyclical pattern, where each set of results is reported, commented on, and then evaluated. This cyclical structure is consistent with findings from other disciplines, suggesting a general consensus among researchers on how to organize these sections. The Conclusion section is typically concise, consisting of three moves: reviewing the present study (M10), evaluating the present study (M11), and promoting future research (M12). The M10 move involves briefing the purposes and methods of the study, summarizing the results, and exemplifying the findings. The M11 move focuses on stating the significance or new insights gained from the study and suggesting the applicability of the results. The M12 move, although optional, involves stating a practical need for further research or indicating the potential value of future studies.

2.3.3 Summary

The findings of this study demonstrate that Chinese expert writers in energy engineering adhere closely to the established conventions of international scientific communities, both in terms of macro-structure and rhetorical moves. However, they also exhibit flexibility in their use of rhetorical strategies, particularly at the step level, where certain steps are classified as optional or quasi-obligatory. These results

have important pedagogical implications for EAP practitioners. The strong adherence to international conventions suggests that Chinese expert writers could play a valuable role in helping novice researchers develop the skills needed to publish in international journals. EAP courses could benefit from incorporating authentic reading and writing tasks that involve collaboration between English teachers and subject specialists. Additionally, EAP instructors should be aware of both the common core and disciplinary variations in RA structures, allowing them to design teaching materials that reflect the diverse practices within different engineering disciplines. In conclusion, this study provides a comprehensive analysis of the macro-structure and rhetorical moves in energy engineering RAs written by Chinese expert writers. The findings suggest that these writers follow international conventions while also using flexible strategies to achieve their communicative purposes. This combination of adherence to conventions and flexibility in rhetorical strategies highlights the potential for collaboration between English teachers and subject specialists in addressing the challenges faced by novice researchers in China. By leveraging the expertise of established researchers, EAP practitioners can create more effective and relevant instructional materials, ultimately helping students navigate the complex process of publishing their research in high-impact international journals.

2.4 Rhetorical structures of research articles in three engineering sub-disciplines

The research article “Distinguishing textual features characterizing structural variation in research articles across three engineering sub-discipline corpora” by Kanoksilapatham [9] examines the textual organization and structural variations in research articles across three sub-disciplines of engineering: civil engineering, software engineering, and biomedical engineering. The study focuses on understanding how these variations reflect the unique characteristics and disciplinary perspectives of each sub-discipline. The study begins by contextualizing the importance of research articles in academic and professional communication, particularly in engineering. It acknowledges the growing emphasis on publishing in high-impact journals as essential for academic and career advancement. Given this context, the study highlights the relevance of genre analysis, particularly Swales’ [3, 4] genre analysis framework, in understanding the typical structural patterns followed by RAs across different disciplines. Kanoksilapatham notes that while genre analysis has been extensively applied to various sections of RAs across disciplines, much of this work has been limited by small sample sizes or by focusing on individual sections of RAs rather than their entire structure. This study seeks to address these limitations by analyzing a large, representative corpus of RAs from three engineering sub-disciplines, aiming to capture both the general patterns and the sub-disciplinary variations in textual organization.

The study employs a corpus-based approach, analyzing 180 full-length RAs from the three engineering sub-disciplines: civil, software, and biomedical engineering. These articles were sourced from five high-impact journals in each sub-discipline, with the selection based on the journals’ impact factors to ensure representativeness. The corpus is large and balanced, consisting of 60 RAs from each sub-discipline, yielding approximately 1 million running words. The analysis focuses on the four main sections of RAs—Introduction, Methods, Results, and Discussion (IMRD)—using genre analysis to identify the moves and steps that characterize the textual organization of each section. To ensure reliability, the study includes an inter-coder reliability analysis, involving experts from each sub-discipline, to validate the

segmentation and classification of moves and steps within the texts. The frequency of occurrence of these moves and steps is quantified, and statistical tests are used to identify significant variations across the sub-disciplines.

2.4.1 Rhetorical structures of research articles in three sub-disciplines

The analysis of the Introduction sections across the three sub-disciplines reveals a consistent use of Swales' three-move structure: Move 1 (Establishing a territory), Move 2 (Establishing a niche), and Move 3 (Presenting the present study). However, significant variations are observed at the step level. Move 1: While the overall use of Move 1 is consistent across the sub-disciplines, the step "Claiming centrality" is less frequently used in civil engineering (48%) compared to software and biomedical engineering (around 75%). This could reflect the established nature of civil engineering, where the importance of the field may not need to be emphasized as strongly as in newer or more rapidly evolving fields like software and biomedical engineering. Move 2: The step "Presenting positive justification" is significantly more common in biomedical engineering (41%) than in civil or software engineering (around 10–12%). This is likely due to the high stakes involved in biomedical research, where the justification for studies, particularly those involving human subjects, is critically important. Move 3: Software engineering RAs frequently include steps such as "Outlining article structure" (50%) and "Announcing principal outcomes" (83%), reflecting the fast-paced and methodologically diverse nature of the field, which may require authors to guide readers more explicitly through the structure and findings of their research. In the "Methods" section, the study identifies three main moves: Move 4 (Describing procedures), Move 5 (Featuring other methodological issues), and Move 6 (Reporting and consolidating findings). Move 4 is obligatory across all sub-disciplines, while Moves 5 and 6 are optional. Move 4: Significant differences are observed in the step "Specifying protocolized procedures," which is absent in software engineering but present in civil and biomedical engineering. This reflects the established nature of procedures in the latter two fields, where standardized methods are more common. Move 5: The presence of steps like "Describing research sites" is unique to civil engineering (44%), highlighting the importance of geographical context in this field, which contrasts with the absence of this step in the other sub-disciplines. The Results sections are characterized by three moves: Move 7 (Summarizing procedures), Move 8 (Reporting results), and Move 9 (Commenting on results). The central move, Move 8, is obligatory across all sub-disciplines, while the other two moves are conventional. The Results sections across the sub-disciplines show a high degree of uniformity in their textual organization, with no significant differences in the frequency of moves and steps. This suggests a shared approach to presenting research findings in engineering, regardless of sub-discipline. The Discussion sections are organized around three moves: Move 10 (Reviewing the present study), Move 11 (Consolidating results), and Move 12 (Stating limitations and future research). Move 11 is the central and obligatory move, while Moves 10 and 12 are conventional. Move 11: Steps such as "Explaining results," "Summarizing results," and "Comparing results" show significant variation across the sub-disciplines, with software engineering using these steps less frequently than civil and biomedical engineering. This may be due to the nature of software engineering research, where the focus is often on the practical implementation of new techniques rather than on extensive contextualization or comparison with existing work.

2.4.2 Summary

The study highlights the importance of understanding the textual organization of RAs in different sub-disciplines, particularly in terms of the moves and steps that characterize each section. The findings suggest that while the overarching structure of RAs in engineering is consistent across sub-disciplines, significant variations at the step level reflect the unique characteristics and research practices of each field. These variations have important implications for teaching English for Specific Purposes to engineering students. Understanding the specific textual features of each sub-discipline can help educators design more targeted instructional materials, enabling students to better navigate the conventions of academic writing in their respective fields. Moreover, the study underscores the value of interdisciplinary collaboration in genre analysis, particularly the involvement of subject matter experts in validating the analysis of specialized texts. Kanoksilapatham's study provides valuable insights into the structural variations in RAs across three engineering sub-disciplines, highlighting the role of genre analysis in understanding the textual organization of academic discourse. The findings contribute to the broader field of ESP and genre studies by demonstrating how disciplinary and sub-disciplinary contexts shape the rhetorical strategies used in academic writing. By identifying the distinguishing textual features of each sub-discipline, the study offers practical guidance for both researchers and educators in improving the quality of professional communication in engineering.

3. Conclusion

This chapter has rigorously analyzed the rhetorical structures of research articles (RAs) across four prominent disciplines: applied linguistics, law, energy engineering, and three engineering sub-disciplines. Kanoksilapatham's research on engineering sub-fields demonstrates that variations in RA structures are driven by the distinct methodologies and objectives inherent in disciplines such as chemical, electrical, and civil engineering. Research in engineering typically follows strict empirical methodologies and standardized structures, notably the IMRD format (Introduction, Methods, Results, and Discussion), which prioritize clarity and precision to facilitate replication. This finding underscores that while engineering fields share a common goal of problem-solving, structural differences arise from the nature of the problems being addressed—whether experimental or theoretical. This insight has critical pedagogical implications for teaching research writing to engineering students, as it suggests that writing instruction should account for the specific rhetorical needs of each engineering sub-discipline. In the domain of law, Tessuto's work highlights the integration of interdisciplinary elements into legal writing, leading to rhetorical moves that merge traditional legal reasoning with empirical and theoretical insights from the social sciences and humanities. Tessuto argues that such interdisciplinary influences not only shape the rhetorical structure of legal RAs but also necessitate a more flexible approach to teaching legal research writing, encouraging students to recognize how legal discourse frequently incorporates methodologies from non-legal fields. This interdisciplinary flexibility challenges conventional legal writing pedagogy, advocating for a broader understanding of how legal arguments can be constructed through the lens of multiple disciplines. Yang and Allison's research on applied linguistics reveals that the field's diverse objectives—ranging from language acquisition to pedagogical methods and linguistic theory—result in a wide range of structural


approaches. This diversity in rhetorical structures reinforces the need for pedagogical strategies that accommodate such variation, thereby equipping students to navigate the different sub-fields within applied linguistics and meet the specific rhetorical expectations of each. Ye's comparative analysis of energy engineering articles authored by Chinese scholars offers further insights into how cultural and linguistic contexts shape rhetorical structures in non-Western academic writing. This examination highlights the significance of cultural influences not only on the macro-structure of research articles but also on the persuasive strategies employed by authors. The findings have important pedagogical implications for teaching research writing across international contexts, emphasizing the need to account for cultural variability in rhetorical conventions. The analysis reveals significant interdisciplinary and intradisciplinary variations in the rhetorical structures employed across these fields, reflecting the diverse communicative demands and epistemological orientations of each discipline. Such findings underscore the complexity of RA writing, advocating for a more nuanced approach to English for Academic Purposes (EAP) instruction. By illuminating the distinct rhetorical features of each discipline, this study provides a robust foundation for developing instructional materials tailored to the specific needs of students and novice writers. These resources can enhance students' awareness of disciplinary genres, enabling them to engage more confidently and effectively with the conventions of academic writing within their respective fields. The overarching takeaway from this genre-based analysis is that while structural variations across disciplines are shaped by each field's methodologies, objectives, and cultural contexts, they all share the common objective of disseminating knowledge. This unified understanding highlights the pedagogical importance of teaching discipline-specific rhetorical structures while also recognizing the value of interdisciplinary flexibility. As a result, adaptive teaching methods are necessary to help students navigate both the conventions of their disciplines and the opportunities for cross-disciplinary rhetorical practices, ultimately fostering the production of high-quality research outputs that adhere to the rhetorical norms of their respective fields.

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Chapter 8

Historical-Linguistical and Social Analysis of Brazilian Research on the Definition of Rewriting in High School between 1998 and 2018

Silvana Silva and Joicyane Carolaine Santos

Abstract

The aim of this research is to analyze the rewriting activity focused on the high school context in the period from 1998 to 2018. Therefore, three base theories were necessary to be the ground of the research corpus, namely, the first, Benveniste's Theory of Enunciation (1989), which addresses enunciation and its subjective aspects to direct the change that occurs in the relationship between the "I-you," the second, that of Swiggers (2013), is support for the historical-linguistic analysis of the definition of rewriting, and finally, the third served the National Curriculum Parameters—PCN's (1998) and the Curriculum Guidelines of Secondary Education—OCN's (2006). In addition, a social survey was carried out to point out the school sectors with more research related to the theme, be it public or private, and from which regions each article selected for this study was produced. As a result, it was observed that the definition of rewriting in the high school context has suffered little variation over the years. It was also observed that there is a higher rate of research produced in the South, Southeast, and Midwest regions in relation to the North and Northeast, in addition to the fact that the schools with more productions that fit the criteria of this article were those in the public sector.

Keywords: rewriting, enunciation, linguistic historiography, social analysis, high school

1. Introduction

This article represents the continuation of the Research Project "History of Rewriting in Brazil: Twenty Years of Research" (Instituto de Letras, Universidade Federal do Rio Grande do Sul, Brazil). In this study, we focus on high school education, examining whether the practices of adopting linguistic discourse in the conduct of rewriting activities follow a similar or different path compared to higher education [1]. The hypothesis of this work is that, in high school, linguistic discussion reaches teaching practices more quickly and uniformly than in higher education, since educational legislation is strongly directed toward basic education.

In view of this, the need to discuss the proposed structure for teaching the Portuguese language in high school becomes urgent. Among the points to achieve this objective, this article seeks to understand whether the definitions of writing and rewriting contained in the National Curriculum Parameters (1998) as well as in the Guidelines for High School Education (2006), linked to contemporary linguistics, align with the reality of language teaching practices over twenty years, as expressed in the scientific articles under analysis. It is important to mention that language teaching practices suffered a series of changes obliged by specific legislation during the 2000s. One of the most important changes—and focus of our paper—are the writing and rewriting practices.¹ Previously, language teaching was centered on grammar and very narrow exercises of interpretation; from National Curriculum Parameters (1998) on, the focus changed to the writing of genuine texts and rewriting them in order to improve students' linguistic abilities.

For this, we use the studies of Swiggers [2], which allow us to follow a reliable path regarding the analysis of linguistic-historical facts. It was also necessary to survey data that revealed the index of scientific productions on writing and rewriting texts in high school, both in public and private schools, in order to evaluate whether the changes present in the data of this research are influenced by the place of teaching as well as to verify which Brazilian regions have dedicated space for research on rewriting. It is important to mention that we will add a further category of analysis: Brazil's region disparities in language teaching. It is well known that a continental and so diverse country as Brazil would certainly have inequalities in access to and quality of Education. This paper will set analysis of writing/rewriting research around the five regions of Brazil: South, Southeast, Midwest, Northeast, and North. As far as we know, this specific research has not been conducted yet.

Finally, it is important to note how fundamental Émile Benveniste's [3] Theory of Enunciation is to include a reflection on the issue of textual production,² as it takes into account the intertextuality present in writing and how the view of the "other" can aid in effective rewriting. Based on these three main studies, the objective of this work is to analyze the subjectivity present in the text in order to shape a definition for rewriting through a review of the past to better direct this activity in the future.

2. Systematic review

For this study, a systematic review of the literature was necessary. This approach "is a form of research that utilizes data sources on a particular topic" [4] and directs the way of reviewing and selecting viable data to support the research.

¹ In this context, rewriting practices refer to the process in which students revise and improve their own written texts. In the past, language teaching in Brazil was primarily focused on grammar and narrow interpretation exercises. However, with the introduction of the National Curriculum Parameters (1998), the emphasis shifted toward encouraging students to write authentic texts and then rewrite them to enhance their linguistic abilities. This new approach aims to foster better writing skills by allowing students to refine their original drafts, improving coherence, structure, and language use.

² Textual production refers to the process of creating written texts, emphasizing not only the act of writing but also the development of ideas, structure, and linguistic choices. In educational contexts, particularly in language teaching, textual production involves guiding students to generate coherent and meaningful written content, moving beyond mechanical exercises.

In fact, to aggregate evidence, it is essential to have a methodology capable of synthesizing the literature. By clearly and explicitly summarizing all studies on a particular topic, “systematic reviews allow us to incorporate a broader spectrum of relevant results, instead of limiting our conclusions to the reading of only a few articles” [4].

To achieve this review’s effectiveness, it is necessary to follow several steps described by Sampaio and Mancini [4]. First, it is necessary to define the key question, which should determine the direction of the research and include the description of the study, the context, the population, the intervention, and the probable outcome for this sequence. After that, evidence must be sought. In this stage, data search sources are used, and it is essential to ensure that all significant articles are included. Then, articles with keywords in their title and abstract are reviewed, and the content of the data is analyzed.

Analyzing the methodological quality of the selected studies is fundamental for the literature review, and therefore, the presentation of results is necessary. These can be documented through tables, defining the author, year of publication, and methodological design [4]. For this study, all the steps were rigorously followed, and the results will be presented later.

3. National curriculum parameters and guidelines for high school education

The standardization of the National Curriculum Parameters (PCNs) [5] in 1998 introduced new approaches to working with writing and rewriting texts. The primary change brought by the PCNs concerns written enunciation and the necessity to value the entire intertextual process involved in textual production. “Writing is essential: it transcends the simple act of writing a text, putting words on paper” [6].

It is understood that the lack of emphasis on writing and rewriting texts in Portuguese has become one of the factors responsible for dropout rates and school failure in high school. Therefore, the teaching of Portuguese was criticized and required a regulatory document to change the structure of basic education. According to the PCNs [5], these changes were necessary advancements in the field of education, particularly concerning the acquisition of writing skills.

Currently, the proposal for teaching Portuguese language, both in spoken and written forms, focuses on effective interaction rather than purely producing texts for correction. “When produced, discourse manifests linguistically through texts. The product of oral or written discursive activity forms a meaningful whole, regardless of its length. A text is a verbal sequence composed of a set of relations established through cohesion and coherence. In other words, a text is only a text when it can be understood as a meaningful global unit. Otherwise, it is merely a random collection of statements” [5].

The PCNs emphasize the importance of discourse form and production in the classroom, acknowledging that this production does not occur in isolation. “All discourse is related, in some way, to those that have already been produced” [5]. Following this logic, texts are results of discursive activity and are constantly related to each other, demonstrating intertextuality as previously mentioned.

Not only did the National Curriculum Parameters propose this new structure, but the Guidelines for High School Education (OCEM) in 2006 also brought discourse

practices into the student's reality. "The activities conducted in the Portuguese language subject, within the high school context, should provide students with the refinement of reading and writing skills, speaking, and listening" [7].

Additionally, the OCEM [7] highlights that fully understanding the variations in the production and reception process across the multiple dimensions of a text is challenging. Therefore, it is necessary to understand the linguistic dimensions linked to phonological, morphological, syntactic, and lexical resources [7].

Furthermore, the OCEM states that textual dimensions are the most addressed in text reworking, as they involve configuring the text within each discursive genre or textual sequence. However, it is essential to go beyond textual and linguistic dimensions. For example, the sociopragmatic and discursive dimensions focus on the relationship between the text and its interlocutors, the social role of the text's author, the intended audience, the motivations for interaction through the text, and more.

Moreover, the individual's association with their knowledge of the world makes them a real author, producing a text that conveys information beyond being merely corrected by someone else, usually the teacher.

For a text to achieve the objective of interacting with the surrounding world, organizing activities that foster the student's development of competencies is necessary. Examples brought by the OCEM include written production and text reading activities, oral text events (lectures, debates, etc.), and retextualization activities, which involve producing texts from other texts, both oral and written. These systematic experiences in learning to write and rewrite texts allow students to engage critically and playfully with the world, contextualizing their productions and enabling others to interact with them.

The OCEM for High School Education [7] reaffirms this vision brought by the PCNs, emphasizing the need to develop activities that foster the creation and re-creation of texts with the objective of writing and rewriting them until they are suitable for their intended function.

Therefore, it can be affirmed that these documents directed Portuguese language teaching in a more efficient manner, considering the intertextuality present in productions and promoting the inclusion of language use in its various contexts. As Benveniste [3] explains in his Enunciative Theory, this is the vision to be applied in classrooms starting in 1998, with the goal of verifying high school students' productions since then. With the reaffirmation of the Guidelines specifically for the high school context, text, writing, and rewriting have consolidated as central axes for high school education.

4. Enunciation theory

In Brazil, studies in the field of enunciation are fundamental for understanding the teaching of Portuguese, with one of its applications being Émile Benveniste's Enunciation Theory and its application in writing and rewriting texts.

When we think of enunciation, we immediately think of spoken language at the moment it is enunciated, as Benveniste informs us that "enunciation is putting language into operation through an individual act of usage" [3]. Additionally, according to Flores [8], Benveniste describes a path to understanding the formal framework of enunciation, as quoted in "The Formal Apparatus of Enunciation": "[...] as soon as he declares himself a speaker and assumes the language, he sets up the other in front of him, whatever the degree of presence he assigns to this

other. Every enunciation is, explicitly or implicitly, an allocution, it postulates an addressee” [3].

This indicates the necessity for enunciation, both spoken and written, to undergo the process of intercalation between “I-you,” which Benveniste calls the correlation of personality. The author derives this correlation from the marks of subjectivity presented by the individual from the moment they appropriate the language. D’Ávila [9] reaffirms what Benveniste states by saying that for this inversion of positions between “I” and “you” to occur, it is necessary for “you” to say “I” to take the place of the enunciating subject.

Therefore, it is through this need for correlation that writing can be analyzed with a different perspective from that of the writer, as there is an addressee to receive the messages of written enunciation and interact with them, thereby changing, in some way, the original text thanks to the vision of the “Other.”

Some linguists use different approaches regarding language and its uses. However, it is a fact that “learning the meaning of sentences or utterances, products of enunciation, involves identifying the marks left by the speaker when assuming themselves as the subject of their discourse” [9]. This notion of the subject brought by Benveniste is what allows written enunciation to relate to the task of rewriting and make it a tangible and effective approach.

When discussing the correlation of personality, it is also necessary to address the correlation of subjectivity, which is crucial for the continuation of this content, as enunciation marks the index of persons according to the linguist, and it is through these indices that the level of subjectivity present in the text can be inferred. D’Ávila [9] explains this correlation: “Indeed, you, although effectively considered an element of the correlation of personality, is established by I outside of it, in an exteriority that can only be conceived from I. This exteriority does not imply, however, the suppression of the human reality of dialogue. Thus, the author defines you as the non-subjective person, contrasting it with I, the subjective person.”

This is the aspect that so strongly influences enunciation: this subjectivity is what is needed in this article to understand how the interlocution between “I” and “you” can lead to the improvement of written enunciation. Benveniste emphasizes that “the individual act of appropriating language introduces the speaker into their speech” [3], therefore, “the presence of the speaker in their enunciation makes each instance of discourse an internal reference center” [3]. Thus, the intention is to apply enunciation in the methodology of language teaching because it is impossible to think about language without working through all the subjectivity present in this process. This application will be seen later in the data analyses of this research.

5. Linguistic historiography

Interpreting historical events can be a tortuous path, as dealing with the past involves memories, sensitive periods, and nostalgia. For this reason, a researcher who decides to follow a historical path of analysis needs caution and discernment to be as fair as possible in the exposition of the facts of the time.

For this research, aiming to respect scientific precepts, the historiographical approach was chosen to expose the historical periods present in this article. Pierre Swiggers [2] is the key theorist for this purpose, as he deals with the historiography of linguistics by making a “meta-historiography”, that is, detailing how to perform a historiographical analysis of linguistics.

According to Swiggers [2]: “The three main tasks of meta-historiography are: the constructive task (elaboration of a historiographical model and construction of a historiographical language), the critical task (evaluation of types of historiographical discourse combined with the proposal of analysis and appreciation of the methodological and epistemological approaches adopted in the analyzed texts), and the metatheoretical or ‘contemplative’ task (reflection on the object, the status of historiography, the justification of forms of presentation, and what constitutes a ‘linguistic fact’ for the historian)”.

Based on these main tasks, the historiographical objective is “the development of linguistic ideas and practices” [2], and the main object of this method is the text. To know what type of text the historiographer can study, one needs the definition of the history of linguistics. Swiggers [2] states that “the history of linguistics can be defined as the chronological and geographical set of events, facts, and conceptualization processes.” Additionally, the definition of linguistic historiography is “the descriptive-explanatory narrative of linguistic reflection and description in the past (‘past’ that extends to the present of the historiographer).” [10].

To achieve the fundamental objective of the historian, “to reconstruct linguistic ideologies and their development through the analysis of texts situated in their context” [2], it is necessary to organize the description of the studied object based on the historiography of linguistics. Swiggers [2] explains the terminological apparatus that unfolds into: anchorage points and groupings; lines of evolution and content; formats; and strategies.

Given this framework, each stage is essential; however, for the analysis of the data present in this article, it is necessary to understand more about the general evolutionary course, highlighting the evolutionary dynamics of linguistics in a more distinct manner regarding short-, medium-, or long-term processes. Thus, this evolutionary course explains discrepancies or similarities in the evolutionary progress of various forms of linguistic thought, verifying and validating changes in specific linguistic concepts.

Swiggers [2] provides a meta-historiographical description, explaining the lines of implementation. He cites conceptual areas that define linguistic issues, anchorage points that are the selected texts for the research, and finally, the evolutionary directions that constitute the analysis of discrepancies or the maintenance of specific concepts or thoughts, such as change, revolution, stagnation, progression, conversion, conservation, loss, rejection, (dis)continuity, innovation, and anticipation [2].

To conclude this section, the importance of conducting linguistic historiographical studies is highlighted to bring forth reflections such as this: “The history of reflections and efforts made in favor of the phenomenon of language is an essential part of our history as human beings, and its study not only teaches us a lot about the history of linguistics (and its proto-history) but also about the central role that language has played and still plays in the history of cultures, societies, and the intellectual activities of humanity” [2].

6. Materials and methods

To achieve the objectives of this research, a systematic literature review was conducted, following the steps described by Sampaio and Mancini [4] regarding data collection to support this article. This began with the formulation of guiding questions: (a) What is the definition of rewriting based on enunciation over twenty years of research? (b) Which period has the highest evolutionary index in relation to enunciation as a support for the definition of rewriting? (c) Which region of Brazil has the

most research in this niche? (d) Which educational sector—public or private—has produced the most on the topic?

Next, the inclusion criteria necessary to select the studies for this research were established, which are: (a) Texts that discuss writing and rewriting in Portuguese teaching (language teaching area); (b) Only in Portuguese; (c) Covering a period of twenty years from 1998 to 2018; (d) In the context of regular high school; (e) Where it is possible to measure whether the high school is public or private; (f) Where it is possible to identify the Brazilian regions where the research was conducted. It excluded researchers on teaching practices in other disciplines (theater, history and so on).

It is worth noting that the historical period of the research was determined by the promulgation of the National Curriculum Parameters to analyze the effects and changes brought about by this document in Brazilian high schools.

Knowing that what does not meet the inclusion criteria would be part of the exclusion criteria, data from the CAPES, SciELO, and Google Scholar platforms were used to select the articles in accordance with this research. After reviewing 100 pages from each platform, more than 70 articles on the topic were identified, but only 23 met the criteria established for this work. They are: [4, 5, 11–31].

The material was read, cataloging the information in tables in chronological order, with details of the author, year of publication, definition of rewriting provided by the author, correction method used in the rewriting process, and learning outcomes for the student from the writing and rewriting process based on the other's perspective. It should be noted that most of the articles are research conducted by teachers and/or undergraduates who went to high school classrooms to apply their theories on textual production. Based on this data, it is possible to conduct a historical-linguistic analysis to determine a definition for rewriting based on enunciation.

7. Results and discussions

It is possible to see that the definition of rewriting has been (re)shaped over the years and the level of education in question. This change allows us to perform a historiographical analysis of the general concept of rewriting and measure how a definition can interfere with or assist both the teacher and the student in the Portuguese language subject.

Next, we will observe how the twenty years of research were divided and what information was brought by each division. Before presenting the periods in which the definition of rewriting underwent changes, it should be noted that the periods absent from the infographic are due to gaps in research that met all the inclusion criteria determined by this study.

Since the promulgation of the National Curriculum Parameters (PCNs), there has been a greater need to modify the way Portuguese is taught in schools. In regular high school, rewriting can be a source of difficulty for many students. Therefore, it is necessary to analyze what has been defined about it over these twenty years to try to find possible answers to the partial rejection of the rewriting task.

To begin, these twenty years were divided into five periods, grouping the years with similar definitions and making them one, as observed in **Figure 1**. In these periods, it is possible to observe that research on writing and rewriting texts in the high school context began in 2004, seven years after the promulgation of the PCNs.

In the first period, there is a definition of rewriting based on problem-solving, focusing on the structure of the text and making choices that improve the writing and

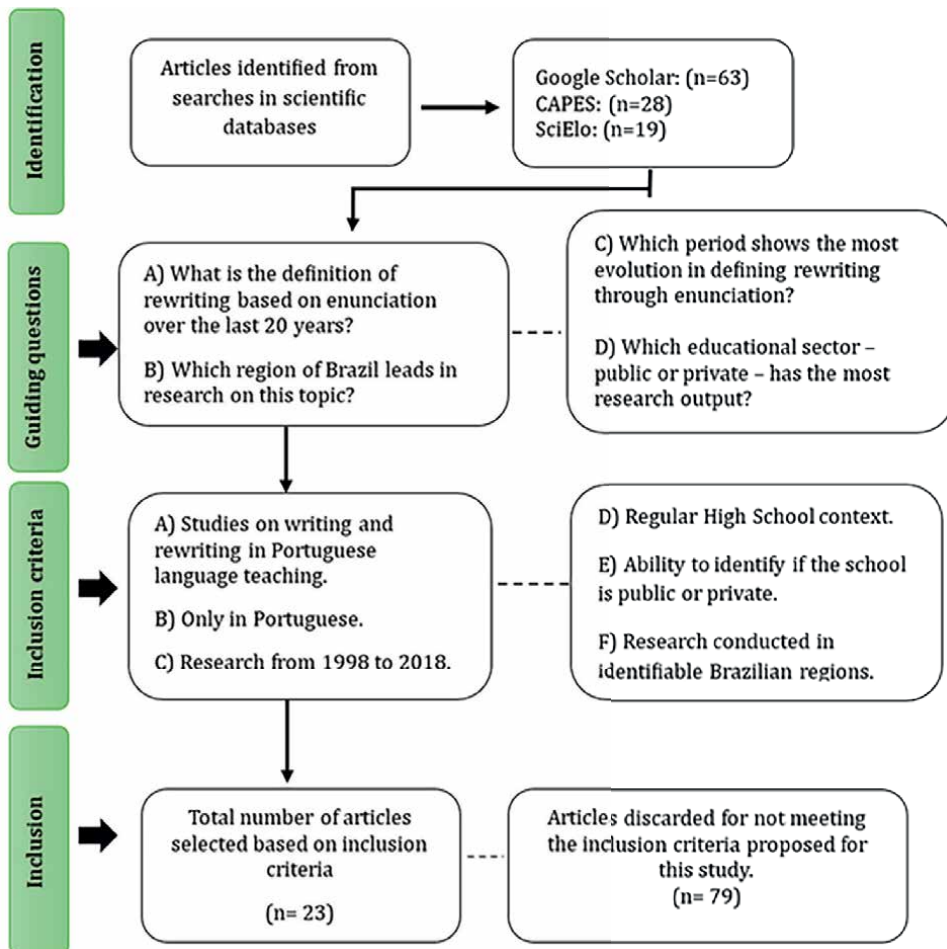


Figure 1. Flowchart of the scientific dataset and criteria used for inclusion. Source: Own elaboration.

clean up the text according to grammar and formal enunciative problems. According to Nascimento [11], “the redoing is undoubtedly a moment of return to one’s own writing, to, among other less ‘pragmatic’ objectives, solve problems through the mediation of the teacher and/or the peer.” This cited article represents a beginning for the application of the PCN approaches regarding the intersubjectivity of the text, but it was still limited to grammatical, lexical, and other structural corrections.

From 2007 to 2012, considered by this research as the second period, the following definition emerged: rewriting is thinking about the other, the interlocutor, as a transparent, authentic, and conscious subject of their words. This definition was taken from the article by Malentachi and Menegassi [12], which explained the reasons that led to the production of the study as follows: “The proposal to produce the opinion article was, first, an invitation for the student to speak and, at the same time, to speak about themselves. For this, among other aspects, the research subjects were encouraged to question the arguments of authority, as they do not translate into absolute truths and, therefore, can be refuted through well-developed and convincing counter-arguments. Finally, it was shown that the most important thing in writing

is to act on the other, showing oneself to the interlocutor as a transparent, authentic subject, conscious of their words.”

Other studies in this period define rewriting as a correction of linguistic competencies that were not achieved in the previous writing, as Sousa [13] exposes: “The act of writing generates the appropriation of linguistic capacities, a process of expressing and organizing thought in individual written language, and being a social attribute, it becomes social in practices and uses pragmatically in its social context.”

Continuing, entering 2014–2015, we have the third historical period of this research. In this period, the definition of rewriting unfolds as follows: rewriting is thinking about the circumstances, reflecting on writing based on genre, and intervening in the dialogic composition through the socio-cultural environment in which the writer is inserted. According to data taken from nine articles in this period, as Farias [14] states, there is a deficit in public schools that do not provide effective rewriting teaching based on what rewriting should be. Let us see: “As we have seen so far, writing is acquired processually, and the exercise of writing leads us to excellence in writing certain textual/discursive genres. However, in most public schools, what we observe is not teaching that provides students with this effective exercise of writing, rewriting, reflection, and improvement of writing in the genres seen or studied.”

Santos [15] confirms this position by stating that “The students’ writing started to be seen differently; beyond the structure and textual elements previously worshiped, writing is now considered in its context and as a social activity, so that, when writing a text, the subject collaborates with the interaction between other readers and writers.”

Thus, it is clear that the third period has a writing definition closer to what was required by the PCNs (1998), consolidating the need to work on writing and rewriting based on all the intertextualities present in this process.

However, in the following two years (2016 and 2017), considered as the fourth historical period studied, there is a more basic definition of rewriting, returning to the early stages of this definition. In other words, rewriting was again seen during this period as a process done to review the text for spelling problems, a cleanup, a way to trim the text’s edges.

According to Hermont [16], there is a failure in the public system regarding the teaching of the Portuguese language due to the way the writing issue is addressed. In this text, the authors aim to explain to students what writing a text would be: “Initially, we will bring considerations about text production and spelling, then deal with taxonomies related to the spelling proposed by normative grammar. Next, we will present the data collected for this work, which are ‘deviant spellings’ from the standard norm, and, finally, we will present some pedagogical proposals related to the spelling problems analyzed.”

Going further, there is a critique in the Paris article stating that schools still practice rewriting aimed at text cleanup, as shown in this passage by Paris [17]: “However, although it is common in school to aim for this ‘cleaning operation,’ the data analyzed in this article indicate that it is possible to expand the students’ notion of revision and rewriting, understood only as text cleanup, re-signifying what students understand about such practices.”

After this period, a definition of rewriting closer to the PCN requirements reappeared, precisely in the last period, the fifth, in 2018. Other authors consider that rewriting means prior reflection and practice of writing. “Analysis and review, in fact, are permanent tools because they are constitutive of writing. By carrying out these procedures with the written productions of their peers, opportunities are offered for students to start analyzing and reviewing their own texts, emancipating writing and

favoring the constitution of more authorship in the writing exercise, which should be permanente” [18].

Nevertheless, this view follows that rewriting is a fundamental step in the writing process, since by rewriting, the author produces a new product capable of achieving the general purpose of a text, communication. “This revising look at the text should be the attitude of every subject who proposes to write. Therefore, the statement that rewriting is part of the writing process, as it should always be performed during production. In the school environment, the importance of rewriting is even greater, as it is the moment when, through the teacher’s mediation, the student can improve their text; moreover, by carrying out such an exercise, the student can acquire the practice of revising and rewriting the text, giving greater quality to the final product, which is the central objective of writing teaching” [19].

It seems that the definition of rewriting over time has undergone measurable variation and can directly interfere with the learning process of writing a text. Therefore, to analyze the historiographical line behind this variation, the historical evolution will be exposed next.³

Following the parameters defined by Swiggers [2] regarding the evolutionary directions present in a certain period, we will analyze the evolutionary trends present in **Figure 2**, in order to examine the linguistic variations concerning the definition of rewriting.

Firstly, in this analysis, we will use Benveniste’s [3] Enunciative Theory to verify the level of subjectivity present in each definition of rewriting. It is worth noting that according to the author, enunciation, both spoken and written, involves a process of interaction between subjects, easily transforming “I” into “you,” from the moment one of them takes on the role of “I,” the other assumes the role of “you”. In the text, this interchange is perceived through the observations made by the teacher in the student’s text and also the student’s position regarding their own modified text.

In the first period, which began 7 years after the promulgation of the National Curriculum Parameters [5], we find a definition of rewriting that is half grammatical

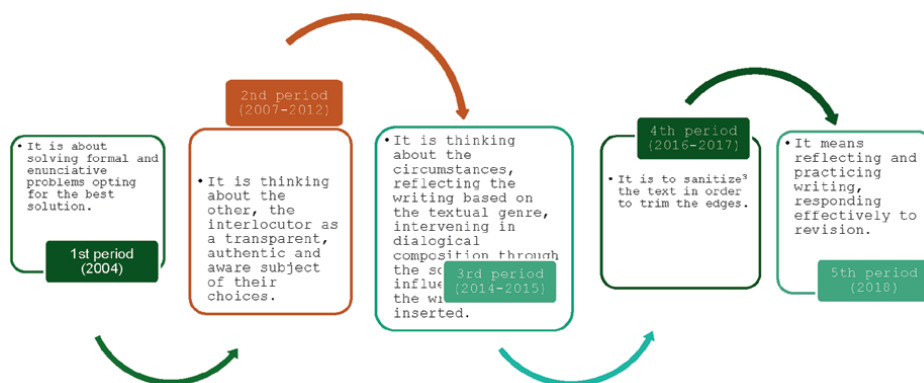


Figure 2. Definition of rewriting in high school between 1998 and 2018. Source: Own elaboration.

³ The word *sanitize* means to *clean up* or *revise* the text by removing excesses, errors, or unnecessary elements. The goal is to make the text clearer, more precise, and well-structured by eliminating redundancies or extraneous parts, refining it into a more polished and concise form.

and half enunciative, without the possibility of determining whether it is extremely far from the requirements of the National Curriculum Parameters or if it is in accordance with what was standardized by this document. However, this will be our starting point, which leads us to the second period.

Unlike the first period, the definition of rewriting in the second period is endowed with the standards required by the National Curriculum Parameters regarding writing and rewriting of texts, observing all intertextual aspects that may encompass this task. This definition carries with it the experience of making rewriting activities a valid and multidisciplinary process in historiographical paths. The definition progressed from the first period because it moved away from a definition based more on grammar and moved toward a more subjective definition, from an enunciative point of view. This progression extends to the third period, which, following the evolutionary path, can be perceived as the continuation of this progression, as it applies enunciation more concretely in the text as a facilitator process of rewriting activity, since thinking about rewriting from the additional perspective of the “Other” involves an exchange of plausible experiences capable of making the rewritten text more complete.

We move on to the fourth period. At this stage, the analyzed texts still addressed the reality of the methodology used by teachers to the detriment of a hygienizing rewriting. We understand this movement as a regression to the definition in the first period (2004), that is, a definition that not exactly follows strictly the PCN’s principles of rewriting. Therefore, there is not much room for the valorization of the linguistic and social aspects present in the writer’s experience.

Fortunately, the fourth period lasts a short time. As demonstrated in **Figure 1**, the fifth period resumes the subjective process of rewriting practices and makes reflections on the text and possibilities of interaction with it more precise and autonomous. With this change, we again have a progression of the linguistic aspects surrounding the definition of rewriting over these twenty years of research.

Beyond the linguistic-textual analyses, a geographical approach was made regarding scientific productions related to textual production with the inclusion criteria determined by this work, focusing on regions with the highest research index on the topic of this article. The five geographical regions in Brazil correspond to the following states: South (Rio Grande do Sul, Santa Catarina, Parana); Southeast (São Paulo, Rio de Janeiro, Espírito Santo e Minas Gerais); Midwest (Mato Grosso do Sul, Mato Grosso e Goiás); Northeast (Bahia, Sergipe, Alagoas, Pernambuco, Paraíba, Rio Grande do Norte, Ceará, Piauí, Maranhão) and North (Tocantins, Amazonas, Pará, Amapá, Acre, Rondônia e Roraima).

It is noted that in the North region, no study meeting the criteria established was found. This is because the few productions raised from this region were related to youth and adult education. Following, with the second lowest degree of research produced on this topic, we find the Midwest region, with only 9% of articles (2–23) addressing writing and rewriting of texts in regular high school.

Regarding the Northeast, research indices on rewriting are higher, with 26% (6–23) of scientific production on textual production. Finally, the Southeast and South have the highest percentages of production. With this data, it can be inferred that the Brazilian education system is not unified and that there are Brazilian regions with a higher index of scientific research. This fact raises questions about the reasons for this discrepancy in the country. The Brazilian educational system may be better implemented in some regions than in others, and if this is the case, there is a need for

incentives and resources to promote more scientific productions in all regions of Brazil because, without support in education, there is no way to increase the scientific research indices of regions located further north. South and Southeast got the higher scores on research on language education: the first, 35% (8–23), the second, 30% (7–23).

In addition to the geographical approach, we conducted a survey of the educational sector with the highest percentage of research on rewriting. It is not new that public education has been questioned regarding its quality when compared to private education, as pointed out by the Orientation Curriculum of High School [7].

Let us see: “Brazilians recognize that the quality of basic education in Brazil needs to improve, especially in public education. Brazilians also evaluate that the quality of education is better in private schools than in public schools, at all levels of basic education” [7].

In this quote, we see a preconception that private schools, financed by private individuals, offer more resources and better conditions for scientific production. However, the data shows us that, as shown in the following **Figure 3**, undergraduates and professors seek to produce their research with students from public schools, perhaps because it is a more accessible location or even to expose the problems present in this context, thus listing more research produced in this educational sector. Therefore, public education continues, even with difficulties, to disseminate knowledge through its researchers (**Figure 4**).

Among the 23 articles selected for this research, 74% of them were produced in public high schools by undergraduates or teachers also from public education, leaving only 26% of research produced by the private education sector.

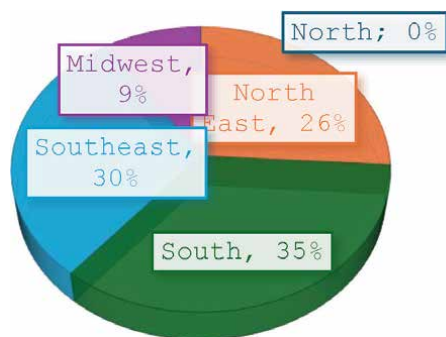


Figure 3. *Articles about rewriting by region of Brazil in the context of high school between 1998 and 2018. Source: Own elaboration.*

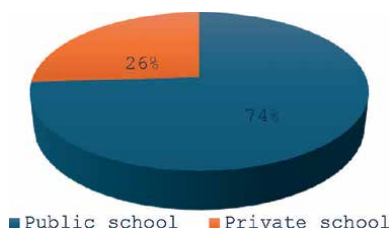


Figure 4. *Scientific production on rewriting in public and private schools in Brazil. Source: Own elaboration.*

In 2007, a period in which, according to this research, we have a definition of rewriting focused on the other, one of the articles that affirmed this is from a private school located in the South of Brazil, stating the following: “The production of text requires going through a sedimentation period and rewriting stages through the mediation of the teacher, so that the student has time and receives guidance to dialogue with themselves and with the internalized knowledge, expressing it clearly and organized, adapting the content of their thoughts on the theme suggested or chosen by themselves, through a discourse that reaches a determined social audience” [12].

Continuing in the realm of private education, in 2016, the research “Workshops of Fanfictions in school: investigating practices of revision and rewriting” [17] produced in São Paulo, Southeast Brazil, criticizes the way rewriting is taught in high schools, showing that students are often limited in rewriting, as their rewriting practices aim only to sanitize the text. “However, although it is common in school to aim for this “cleaning operation,” the data analyzed in this article indicate that it is possible to expand students’ understanding of revision and rewriting, understood only as a “cleaning process of grammatical errors” of the text, redefining what students understand regarding such practices.” [17].

It can be observed that the author verifies the possibility of expanding students’ knowledge regarding the text and justifies that they understand that the text requires a deeper analysis, but they are unable to do it. Thus, we have two distinct periods in the same educational sector with different approaches regarding the teaching of the Portuguese language based on the National Curriculum Parameters [5] and the Curriculum Guidelines for High School [7].

Now, let us look at the public education sector, starting by showing that there are also conceptions of rewriting based on “cleaning text from grammatical errors” in the public sector and that this conception evolves to be closer to what is required by the National Curricular Parameters, as exemplified by the research by Oliveira [20] produced in the Southeast of Brazil, in Minas Gerais, which states: “revision contributes for the child to re-elaborate concepts about textual structure, considering aspects related to the informativeness level of the text, spelling, handwriting, and agreement.”

In the same year and in the same educational sector, there is another research produced in the South, namely, “The influence of speech in writing: pedagogical tool for rewriting” [21], which defines rewriting as a revision of arguments, ideas, and elements that compose the text genre. The authors start the text with a very important observation: “The recognition and awareness, through linguistic analysis, of the marks of orality in written text, led to transformations in rewriting, in standard language. There was an evolution of the oral and written language of the students, as one of the many relevant aspects of their development as observers and critics, participants in an increasingly demanding society” [21].

Like several other researches produced in public schools and in the context of high school, other regions of Brazil also ratified, mostly, the notion that to rewrite well, one needs to use valid, intersubjective, and intertextual communicative means.

8. Conclusion

In conclusion, it has been observed that writing and rewriting texts is not as simple a task as proofreading texts; it extends beyond the intratextual realm.

According to the National Curriculum Parameters [5], “Every education committed to the exercise of citizenship needs to create conditions for the student to develop their discursive competence.”

The promulgation of the National Curriculum Parameters [5] and the Guidelines for High School Curriculum [7] revealed a gap that used to exist in the teaching of Portuguese. After standardization, it is evident that education sought modification based on these documents. However, there still remains a lack of understanding regarding the process of writing and rewriting a text.

With Benveniste’s Theory of Enunciation [3], one can perceive that enunciation is fundamental for there to be involvement between the speaker and the addressee, and the constitution of personhood is visible in written enunciation as well. Therefore, it can be applied as a method of language teaching to help students develop linguistic competencies.

For this trajectory to be analyzed, the history of linguistics [2] and the analytical paths present to make each historiographical period measurable in this research cannot be excluded. When analyzing the historical process from one time to another, we realize that the adoption of contemporary linguistic practices is not linear and does not act solely in a “cumulative” sense, which suggests that it would be interesting to resort to historiographical models that predict pendular or circular movements as well as explanatory models of such social behaviors.

This research was conducted considering exclusively the language teaching area in this important historical period in Brazil. In order to expand the results and deal with the small amount of papers (23), we consider the importance of a wider study, including writing/rewriting practices in disciplines of humanities (history, geography, arts and so on).

Finally, it is hoped that the Brazilian education system, both public and private, becomes more efficient in shaping citizens capable of effectively communicating in society and, thus, fulfilling their social role.

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Some Determinations as to Whether or Not Academic Texts Are Produced by Artificial Intelligence

Cemile Uzun

Abstract

In recent years, many studies have been carried out on the text generation of artificial intelligence (AI) tools. Some of these studies have analysed the text generation capability of AI tools, and some others have analysed the difference between the texts generated by AI tools and the texts generated by humans. In this study, the difference between the Turkish text production of ChatGPT-4, which is an AI tool, and human-produced texts was investigated according to stylistic elements. ChatGPT-4 and the participants were asked to produce academic and emotional texts, and the texts produced were scored according to the stylistic features identified. The difference between the scores of the two groups was determined statistically. It was found that the AI tools were as successful as human production in producing academic texts in Turkish, but quite different from human production in producing emotional texts.

Keywords: stylistics, artificial intelligence, ChatGPT-4, human-generated text, artificial intelligence-generated text

1. Introduction

AI tools are software systems that perform various tasks by responding to commands using a variety of technologies. AI tools can generate data, analyse data, solve complex problems and make predictions [1]. AI tools are used functionally in a wide and diverse range of fields, from cinema to music, from engineering to language teaching. People use AI tools to generate and support ideas in various fields. People also use AI tools for various purposes in academic text production: faster access to information, the efficiency of AI tools in knowledge generation, the strong translation capability of AI tools and the orientation towards innovative tools. Thus, AI tools are used as powerful auxiliary tools in academic text production. Although AI tools support the production of knowledge, it is the responsibility of researchers to define the general boundaries of the text produced and to interpret the information from a critical point of view.

With the development of AI technology, great strides have been made in language processing and text generation. Various AI tools have been developed that are capable of advanced language generation. AI tools that reflect language intelligence have the

ability to effectively use syntax, semantics and pragmatics to effectively reflect the full complexity of natural language. The language generation capabilities of AI tools are highly developed. Grammar topics such as sentence structure, tenses, construction and inflectional suffixes and word types, which are integrated into the language production capability of AI tools, enable AI tools to use grammar topics correctly. The vocabulary of AI tools is highly developed and they can use words appropriate to the text they produce. AI tools have the ability to produce sentences according to the subject of the text they produce. In addition, AI tools are able to produce texts in different language styles, such as formal, informal, academic, etc. [2].

ChatGPT, developed by OpenAI, is one of the most remarkable AI tools of recent times. ChatGPT is an advanced language model capable of generating human-like text. Using natural language processing techniques, ChatGPT can generate coherent, meaningful and creative text according to human commands [3]. It is important to distinguish ChatGPT-generated text from human-generated text. Stylistic features can be used to distinguish AI-generated texts from human-generated texts, as they allow for in-depth analysis of a text. Some researchers have identified various stylistic features of machine-generated texts. Gatt and Kraemer [4] highlighted the repetition of certain word patterns in machine-generated texts. Bamman and Smith [5], in their study of Twitter, found a lack of emotional intonation in machine-generated texts. Radford et al. [6] mentioned that there is a lack of context and information in machine-generated texts. Jurafsky and Martin [7] found that the use of language in machine-generated texts is uniform. Stylistic features are an important tool for understanding and analysing the linguistic and semantic structure of texts.

In this study, the question “How does a text generated by ChatGPT-4 differ from a human-generated text in terms of stylistic features?” is the starting point of the study and the study is built on this research question. The study focused on the generation of Turkish articles by ChatGPT and the differences between these articles and human-generated texts. It was determined how the texts produced by the AI tool differ from the texts produced by humans in terms of stylistic features.

2. Literature review

Many studies have been conducted on the language capabilities of AI tools. Some of these studies are related to improving the language capability of AI tools, some are related to measuring the success of language capability and some are related to measuring translation capability.

The studies on improving the performance of language models of AI tools have integrated different language models into AI tools and evaluated the success of AI tools. Yogatama et al. [8] used many datasets to measure the language capability of natural language processing models. They measured the reading comprehension of natural language tools using the SQuAD 1.1, TriviaQA and QuAC databases. In the studies that scaled the language models of AI tools, they concluded that the language models built into artificial intelligence made the AI tools more accurate in their use of language. Brown et al. [9] trained GPT-3 language models with 175 billion parameters and measured the transferability of the language models. Song et al. [10] measured the linguistic and visual performance of the CLIP model. Scialom et al. [11] focused on the continuous improvement of the learning capabilities of language models. They investigated whether loading new data into language models causes them to forget old data. Fei et al. [12] investigated the ability of pre-trained language models to

categorise text. Kojima et al. [13] investigated the in-context learning capabilities of large language models and found that these models are quite successful in complex reasoning. Su et al. [14] developed data annotation strategies for more effective use of large language models. Zhao et al. [15] investigated the knowledge generation capabilities of pre-trained language models. Shliazhko et al. [16] introduced the mGPT tool as a multilingual language model and evaluated it using various methods.

It is also observed that the linguistic performance of AI tools has been measured in terms of the ability of AI tools to produce text, and the difference between the texts produced by AI tools and human-generated texts. Turing [17] developed a test to determine how computer-generated text differs from human-generated text. Haarmann et al. [18] evaluated news texts generated by computer software. Graefe et al. [19] evaluated sports texts generated by different software programs compared to similar articles written by humans. Liu et al. [20] conducted an experiment in which an AI was asked to write poems from pictures. In this experiment, they also tested the accuracy of the Turing test. Köbis and Mossink [21] also conducted a study to investigate how different AI-produced poetry is from human-produced poetry. Buschek et al. [22] used artificial intelligence models that produce text like human speech. Winata et al. [23] fed English examples to the GPT and T5 models. They found that the models produced better data in English with cross-lingual predictions. Gunder et al. [24] conducted two different studies to determine whether the texts produced by AI could be recognised by humans. When they compared AI-generated texts to human-generated texts, they found that it was difficult to distinguish between AI-generated and human-generated texts. Štefánik et al. [25] evaluated the data generation capabilities of in-context models for Polish, Czech and Russian. AlAfnan and MohdZuki [26] analysed the texts produced by ChatGPT-4 in different writing styles and determined how ChatGPT-4 has a stylistic structure. Shah et al. [27] studied AI text generation and the technical characteristics of these texts.

In contrast to the previous study, the ability of ChatGPT-4, an AI tool, to produce Turkish texts was compared to human-generated texts. The ability of the artificial intelligence tool ChatGPT-4 to generate Turkish text is analysed by comparing it to human-generated texts. Such a comparison would be an interesting and important step to understand the success of AI in language generation and to see its strengths and weaknesses.

3. Method

Specific criteria such as “sentence length, paragraph length, word choice, modality, tense, voice, pronouns, lexical density, keyword density, lexical variety and readability” are used to evaluate the stylistic features of AI tools [27]. This study used the criteria of “word choice, sentence structure, grammar, spelling and punctuation, paragraph structure, section headings, structuring, originality and interpretive style” to determine the difference between human-generated texts and AI texts. The study examined the ability of ChatGPT-4, an AI tool, to produce Turkish text and whether the text it produced could be distinguished from human writing. The texts produced by ChatGPT-4 were compared to the texts produced by humans according to the specified criteria.

The focus of our study is a less researched area such as artificial intelligence text generation in Turkish. For this reason, a narrower dataset was preferred in the initial phase. Our aim is to establish a foundation by obtaining the first findings in this field

	Joy		Sadness		Language teaching		Global warming	
	Academic text	Emotional text	Academic text	Emotional text	Academic text	Emotional text	Academic text	Emotional text
Number of human-generated texts	5	5	5	5	5	5	5	5
Number of ChatGPT-4-generated texts	5	5	5	5	5	5	5	5

Table 1.
Total number of ChatGPT-4 and human-generated texts.

and to analyse the subject in depth with the existing limitations. Since using a wider dataset is a process that requires time and resources, such an expansion is planned in the following stages. This study aims to fill the gap in the field and provide a starting point for more comprehensive research in the future.

3.1 Participant characteristics

Participants were selected from native Turkish speakers studying at the Ph.D. level in the Department of Turkish Language. The sample consisted of two male and three female students aged 20–35 ($M = 28.5$, $n = 5$).

3.2 Materials

In this study, six different participants were asked to write one academic text and one emotional text on the topics of “sadness, joy, grammar teaching, global warming” and to write five academic Turkish texts and five Turkish emotional texts from ChatGPT-4, the AI tool. The accuracy of the texts produced in terms of Turkish language was analysed. It was determined how the texts produced by AI tools differ from human production (**Table 1**).

The academic and emotional writing activity lasted for two days. On the first day, the participants and ChatGPT-4 were asked to write academic texts on the topics mentioned above. They were asked to write at least 1000 words for each academic text. ChatGPT-4 was also asked to write an academic text of at least 1000 words on the topics mentioned above. On the second day, the participants and ChatGPT-4 were asked to write emotional texts on the topics mentioned above. They were asked to create each emotional text with at least 1000 words. The texts produced by the AI tool and the texts produced by the humans were evaluated according to stylistic elements.

4. Results

Academic and emotional texts created by the participants and ChatGPT-4 were collected. Each participant and ChatGPT-4 were given manually calculated scores according to the stylistic criteria mentioned above. These scores were collected separately for each topic. The scores of each participant’s responses for each topic were summed and then the scores were averaged. The same procedure was followed for the AI tool. A paired t-test was used to compare the mean scores between the AI tool and the human-generated texts. Cohen’s d value was used to determine the effect size of the difference in scores between the two groups. Cohen’s d was considered weak if it was less than 0.2, moderate if it was 0.5 and strong if it was greater than 0.8 [28].

4.1 Word choice

In both the human-generated and AI-generated texts, it was observed that the words were chosen correctly according to the subject and that technical terms were used skilfully. When creating a text on any topic, AI is very successful in using technical terms appropriate to the text. In texts written by AI, it was found that terms such as “cognitive behavioural, psychotherapy, neurobiology, prefrontal cortex, antidepressants, pharmacotherapy” were used with a good knowledge of the subject.

	mean	sd	Cohen's d
Human written text	99.7	0.82	0.3
AI written text	99	3.74	

Table 2.
The rate of difference in word choice in texts written by Human and AI.

It was observed that AI uses terms in a more mechanised way regardless of context. The average number of words in a sentence of the AI tool is between 15 and 20 (Table 2).

Cohen's d value for the difference in word choice between the human-generated text and the AI-generated text was found to be 0.3. This is generally accepted as a small effect size. It was observed that there was no significant difference between the two groups in terms of word choice and that paying attention to word choice when determining whether a text was written by a human or an AI did not make much practical difference. It is understood that readers may experience some difficulties in recognising AI texts, but this indicates that further metrics and analyses may be needed.

4.2 Sentence structure

The structure of the sentences created by AI is long, informative and descriptive, like the sentences created by human beings. At the same time, these sentences are interwoven with objective and neutral expressions. For example, in the text created by AI, numerical expressions were found in the sentences containing information. "Over the last century, the average global temperature has risen by about 1.2 degrees Celsius". In order for people to use these expressions in their texts, it is necessary either to be prepared for the topic to be written about, or to have a special interest in that topic so that such objective data can be remembered. It was also observed that ChatGPT-4 produced paragraphs between five and seven (Table 3).

Cohen's d value was found to be 0.3 for the difference in sentence structure between the human-generated text and the AI-generated text. It was observed that there was a small effect size between the two groups. It was found that paying attention to sentence structure when determining whether a text was written by a human or an AI did not make a big difference in terms of practice. The readers' attention to the sentence structure of the texts did not facilitate the differentiation between AI and human-generated content.

4.3 Use of spelling and punctuation

There were no spelling or punctuation errors in the texts produced by Human. In the texts produced by AI, only the word "anger" was misspelled as "anger".

	mean	sd	Cohen's d
Human written text	99.6	0.5	0.3
AI written text	99.4	0.8	

Table 3.
The rate of difference in sentence structure in texts written by Human and AI.

	mean	sd	Cohen's d
Human written text	100	0	0.2
AI written text	95	14.1	

Table 4.
The rate of difference in punctuation marks in texts written by Human and AI.

More errors were found in the use of punctuation than in spelling. For example, commas were used after the adverbial verb suffix. "As global warming is increasing rapidly, we will face bigger problems in the future if no action is taken". The fact that the language of ChatGPT is English may have contributed to this situation (**Table 4**).

Cohen's d value was found to be 0.2 for the difference in punctuation between the human-generated text and the AI-generated text. It was observed that there was a weak effect size between the two groups. Paying attention to punctuation when determining whether a text was written by a human or an AI does not make a significant practical difference.

4.4 Grammar

No grammatical errors were found in the human-generated texts. The AI-generated texts did not differ from the human-generated texts in terms of the use of tense affixes, sentence types and word types. No correct sentence usage was found in ChatGPT regarding "time shift", which is one of the Turkish grammar topics. "I want to go on a world tour and I will go next year". There is no information about the future tense of the -yor suffix in the verb "gidiyorum" in ChatGPT. In addition, errors in the use of case suffixes have been observed, particularly in the use of the indicative suffix. For example, in the sentence "During language lessons, we should guide the students correctly", the case suffix is not used correctly (**Table 5**).

Cohen's d value was found to be 0.2 for the difference between the human-generated text and the AI-generated text in terms of grammar topics. It was observed that the effect size between the two groups was at a weak level. Paying attention to grammar rules did not make a big difference in determining whether a text was written by a human or an AI.

4.5 Paragraph structure

In the texts produced by both groups, it can be seen that the paragraph structure is supported by supporting sentences, transitional sentences, elaborative and explanatory sentences (**Table 6**).

Cohen's d value for the difference in paragraph structure between human-generated and AI-generated texts was found to be 0.5. The ratio of effect sizes between the two

	mean	sd	Cohen's d
Human written text	99.5	15.6	0.2
AI written text	97.7	0.5	

Table 5.
Ratio of differences in grammar in texts written by Human and AI.

	mean	sd	Cohen's d
Human written text	99.5	1.1	0.5
AI written text	98.1	3.4	

Table 6.
The rate of difference in paragraph structure between human-generated and AI-generated texts.

groups is moderate. In determining whether a text is written by a human or an AI, the paragraph structure of the text has a moderate effect and does not make a large difference.

4.6 Titles of texts

In both *Insan's* and AI's texts, chapter headings were formed in a logical and hierarchical order. Both groups adhered to the sections of abstract, introduction, method, results and conclusion when producing academic texts. In the emotional texts, subjectivity was at the forefront for both groups, and the paragraphs of the texts were connected within logic (**Table 7**).

Cohen's d value was found to be 0.1 for the difference between the titles of the texts written by Human and AI. The relationship between the effect sizes of the two groups is weak. In determining whether a text is written by a human or an AI, the titles of the texts have a weak effect and do not make a significant difference.

4.7 Structuring of information in texts

The content of a text written by two groups was analysed in depth and some observations were made. Factors such as the fluency of the style of the texts, the accuracy of the information, the structure of the thought and the support of the information in the texts with various data were analysed (**Table 8**).

Cohen's d value was found to be 0.4 in the difference between the human-generated text and the AI-generated text regarding the structuring of information in the texts. It was observed that the AI tool outperformed the human-generated texts in academic text generation. However, this did not create a significant difference between the two groups, and the effect size for the difference between the two groups remained small.

	mean	sd	Cohen's d
Human written text	99.6	0.4	0.1
AI written text	99.5	0.6	

Table 7.
The rate of difference in the titles of the texts written by Human and AI.

	mean	sd	Cohen's d
Human written text	96.7	14.	0.3
AI written text	99.5	0.4	

Table 8.
The rate of difference regarding the structuring of information in the texts written by Human and AI.

4.8 Originality

The texts created by AI are generally taken from databases. However, they are not copies of any author or source. The texts produced by AI are as unique as the texts produced by human beings (**Table 9**).

Cohen's d value was found to be 0.2 for the difference between the originality of the text written by humans and the text written by AI. The relationship between the effect sizes of the two groups is weak. The authenticity score has a weak effect in determining whether a text is written by a human or an AI and does not make a significant difference.

4.9 Interpretation

The AI agent has an interpretive ability equivalent to human intelligence. In the texts produced by the AI agent, an analytical style of thinking similar to that of human intelligence was observed (**Table 10**).

Cohen's d value was found to be 0.1 for the difference in interpretation ability between the human-generated text and the AI-generated text. The relationship between the effect sizes of the two groups is weak. Interpretive ability has a weak effect in determining whether a text is written by a human or an AI and does not make a significant difference.

4.10 Use of emotional expressions

Humans tend to add their emotions to the text when creating an emotional text. However, the emotional texts produced by the AI agent are quite different from those produced by humans. The emotional texts created by the AI agent are also quite different from scientific texts. The emotional texts created by the AI agent are quite unsuccessful in terms of meaning, grammatical usage, etc. compared to the scientific texts created by the AI agent. It has been found that AI tools make mistakes compared to human-generated texts in terms of syntax errors, unnecessary repetition of phrases, illogical sentence transitions and misuse of figurative words. Some examples of misuse in the emotional texts generated by the AI tool are as follows:

"Ama yine de umudumu kaybetmiyorum, belki bir gün her şey daha iyi olacak, belki bir gün yine seninle olacak, belki o gün için yaşamaya devam ediyorum." "Kalbimde senin için attığına inanmak istiyorum, ama her vuruşunda acının biraz daha keskin olduğunu hissediyorum." "Her hatırlayışta, sevgi dolu anları şimdi sadece öfkele bürünmüş bir hayalin yankısı gibi algılıyorum. Birbirimize dokunuşların eşlik ettiği güvencin yerini, şüphe ve yabancılaşma kaplamış."

"But I don't lose hope, maybe one day everything will be better, maybe one day I'll be with you again, maybe I'll continue to live for that day". "I want to believe that my heart is beating for you, but with every beat I feel the pain a little more". "Every time I remember, I perceive the loving moments now as the echo of a dream wrapped in anger. The certainty that accompanied our touch has been replaced by suspicion and alienation."

Cohen's d value was found to be 1.9 for the difference between the human-generated text and the AI-generated text regarding the use of emotional expressions (**Table 11**). It was observed that the effect size between the two groups was high.

	mean	sd	Cohen's d
Human written text	99.4	1.4	0.2
AI written text	99.7	0.4	

Table 9.
The rate of difference in the originality of texts written by humans and by AI.

	mean	sd	Cohen's d
Human written text	99.4	1.4	0.1
AI written text	99.3	1.4	

Table 10.
The rate of difference in the interpretation ability of the texts written by human and AI.

	mean	sd	Cohen's d
Human written text	99.9	0.3	1.9
AI written text	84.9	14.9	

Table 11.
The rate of difference regarding the use of emotional expressions in texts written by humans and AI.

The use of emotional expressions is important in determining whether a text is written by a human or an AI, and it makes a big difference. This finding requires educators and researchers to be cautious about the use of AI in academic writing, considering that AI may be limited in emotional depth.

5. Discussion

In this study, the Turkish texts produced by ChatGPT-4, which is an AI tool, were compared in terms of stylistic features. According to some stylistic features, it was determined whether there is a difference between the texts produced by human and the texts produced by the AI tool. The ratio of the features that differ between the human-generated texts and the texts generated by the AI tool according to the stylistic elements is shown in **Table 12**.

The results of the study showed that stylistic features such as “word choice, sentence structure, spelling and punctuation, grammar, titles of texts, structuring of information in texts, originality, interpretation and use of emotional expressions” are the criteria that can be used to identify AI-generated texts. There is a slight difference between human-generated and AI-generated texts in terms of word choice, sentence structure, spelling and punctuation, grammar, titles of texts, structuring of information in texts, originality and interpretation, but these criteria have a weak effect. Artificial intelligence technology has recently been shown to provide answers that exceed human capacity [29, 30]. This study provides evidence of this. ChatGPT-4 produced very successful texts on the criteria of word choice, sentence structure, spelling and punctuation, grammar, text titles, structuring of information in texts, originality and interpretation. It was also found that ChatGPT-4 used grammatical structure very successfully.

Measures	Cohen's d	The rate of difference between the human-produced text and the text produced by the AI tool
Word choice	0.3	low
Sentence structure	0.3	low
The use of spelling and punctuation marks	0.2	low
Grammar	0.2	low
Paragraph structure	0.5	middle
Titles of texts	0.1	low
Structuring of information in texts	0.4	low
Originality	0.2	low
Interpretation	0.1	low
Use of emotional expressions	1.9	high

Table 12.
Differences in stylistic characteristics between AI tool and human production.

There was a moderate effect between the human-generated and AI-generated texts in terms of the paragraph structure criterion. A significant difference was found between the two groups according to the paragraph structure criterion. The most significant difference between the human-generated and AI-generated texts was observed in the use of emotional expressions. The use of emotional expressions showed a significant difference between the two groups. This situation found between human-generated and AI-generated texts is remarkable. This criterion can provide information about the author of a text. The results of this study provide clues about the characteristics of AI-generated texts. Accordingly, future studies could extend the criteria used in this study and examine AI's text production techniques in more detail.

6. Conclusion

Academic communities are constantly developing new methods and standards to prevent the misuse of AI in academia. However, AI systems themselves are also evolving, increasing their ability to produce more persuasive and human-like texts, so the field is constantly evolving. According to the results of the study, AI tools were found to be rather unsuccessful in producing emotional texts compared to human-generated texts. In order to determine the difference between AI tools and human-generated texts, it was found that looking at emotional expressions was a distinguishing feature. The stylistic feature of AI tools in emotional text production is quite different from human-produced texts.


The findings of this study reveal the challenges faced by AI tools such as ChatGPT-4 in academic text production. In particular, the processing of emotional expressions shows that AI's ability to capture human-specific emotional depth is limited. Future studies can develop a more comprehensive understanding of this issue by examining AI's shortcomings in emotional text production in more depth. Furthermore, studies on different text types and contexts will reveal AI's difficulties in text production and potential areas for improvement.

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Section 4

Pragmatics, Technology,
and Social Cognition

Evaluation of Methods for Testing Early Social Cognition from a Pragmatic Perspective

Franziska E. Viertel

Abstract

In this chapter, I aim to review methods for testing early social cognitive abilities, in particular the assessment of Level 1 perspective-taking (VPT-1) in the visual modality, as it plays a predictive role in understanding the epistemic states of others. To some extent, in the literature, tests of VPT-1 are uncritically reported and replicated without questioning the validity and significance of the results. However, the use of behavioural measures with very young children remains a challenging task, as children draw on many pragmatic resources in a test situation, such as cross-situational interactional experience. In this chapter, I attempt to provide an initial review and interpretation of previous findings from a pragmatic perspective.

Keywords: pragmatics, social cognition, perspective-taking, visuo-spatial perspective-taking, assessment, behaviour measurement

1. Introduction

Every communication situation is characterised by its own pragmatics. The same applies to test situations—especially when two interactants are involved. From a traditional point of view, pragmatics conglomerates context-dependent meanings that go beyond the meaning of a word or a referent [1]. In dialogue, for example, components such as interlocutors, their interaction history, their gestures and facial expressions, their prosody, and even the location of the conversation, constitute pragmatics [1]. In order to introduce the issue, I outline a fictional word-learning experiment in which a child learns a new word for a novel object from the experimenter while playing with it together. The experimenter repeats the word for the object several times so that she can be sure that the child picked it up. In addition, the child is aware of the experimenter's knowledge of the word because she has repeatedly referred to the object with the word form.

Two variations of a test situation could follow the learning phase, differing in their pragmatic frame or interactional format. The concept of pragmatic frames describes a unit of a sequence consisting of actions and language [2]. Following Bruner [3], pragmatic frames are learning units that are co-constructed by two interactants (child

and caregiver) and occur repeatedly in everyday situations. In the example above, the pragmatic frame of a test is a questioning routine accompanied by a pointing gesture.

The experimenter herself could, after a while, ask the child for the name of the new object by pointing to it, looking at the child and questioning, 'Oh, what is that?' (example 1). In this version, the experimenter is asking a question that she obviously already knows the answer to because she already mentioned the label during the learning phase before. For the child, the experimenter's communicative goal is thus difficult to grasp. In addition, what is expected of her remains vague, and this lack of transparency is likely to influence her subsequent response. Changing the experimental situation could lead to a more obvious pragmatics: a second experimenter, who was not involved in the interaction before, enters the room, looks excitedly at the new object, points to it and asks the child, 'Oh, what is that?' (example 2). From the child's point of view, the aim of the questioner is quite different: she is looking for information about the new object, the name of which she does not know.

Bruner [3] distinguishes between a surface layer and a depth structure that are inherent to pragmatic frames. Observable components of a sequence like actions and language are located on the surface layer. So, focusing solely on the sequence of (a) guiding the child's attention to the new object by means of a pointing gesture and (b) questioning for the name of the object (with the same syntax and semantics), frames (1) and (2) do not differ on its surface layer. However, focusing on the depth structure that comprises the achievement of a goal, both testing variations differ substantially regarding the pragmatic role of the experimenters, their background knowledge, their goals (from the child's interpretation) etc., possibly resulting in a failing of the interactants' goal and finally changing the situation on a pragmatics level. Applied to example (1) the ambiguity or lack of transparency of the depth structure in the experimenter's goal could lead to a child's reaction that does not necessarily mirror her cognitive ability (retrieval of the word form), but rather her pragmatic competence. The point here is that the pragmatic frame in a testing situation needs to be perfectly tailored such as in example (2) so that the child is able to unfold her cognitive competence. Rohlfing and colleagues argued that 'pragmatic frames comprise a link between communicative and cognitive skills, individual differences might emerge in these skills' ([2], p. 10). If a testing situation leaves room for interpretation, the child will construe her own pragmatics (drawn from similar past events) and adapt to it in a way that makes most sense to her. Consequently, less validity can be gathered from a pragmatically not well modelled testing situation. The next section shifts the focus to early social cognitive skills, namely visual perspective-taking, before summarising the VPT-1 test methods with their inherent pragmatic challenges in order to analyse these methods.

2. Visuo-spatial perspective-taking in toddlers

Visual-spatial perspective-taking is regarded as one of the first key competencies for understanding others' minds [4], as it forms the embodied foundation for higher mentalistic operations [5, 6]. As such, representing another person's visual perception as contradictory to one's own perception is a pivotal ability for an emerging theory of mind (ToM) and is seen in a continuous developmental line towards false-belief reasoning [7, 8]. Thus, taking another person's perspective in the visual modality requires suppressing one's egocentric view of a scene, an object, or a subject [9] in order to simultaneously and correctly imagine another person's perspective [10].

In the following discussion, after a brief outline of the perceptual and attentional precursors, an introduction to visuo-spatial perspective-taking is given.

2.1 Joint attention and understanding of visual perception as precursors

Prior to the fully developed concept that viewpoints can differ (i.e. partially overlap and partially diverge), infants are already exceptional experts at sharing the same perceptual and attentional focus of their caregivers in dyadic social interactions. Between the ages of 9 and 12 months, infants begin to follow the attentional state of others, cued by nonverbal social cues such as eye contact, pointing and gestures [11], and thus shift their own perceptual focus in favour of someone else's. They reflexively respond to the caregiver's focus of attention by joining in [11]. Although they usually have a slightly different view of an event or object, in joint attention formats the child and parent actually seem to share the same perceptual and mental focus. In terms of behavioural production, at approximately the same time, infants begin to check for another person's attentional focus [12] and to direct it to their own through declarative pointing, showing and alternating gaze, resulting in shared engagement and experience [11, 13]. According to Moll and Meltzoff's stage model of perspectives, this sharing of attentional states forms the basis for an evolving understanding of (different) viewpoints, which is consequently referred to as level 0 perspective-taking [14]. It is only through repeated participation in shared attentional formats that young children are able to infer an existing difference in perspectives and later come to know how a viewpoint might differ from their own [14].

Other authors tend to focus on the understanding of visual perception as a fundamental cognitive achievement of perspectivation [15], overlooking the fact that understanding different perspectives is inherently social and thus learned in social interactions. As a result, this line of research focuses mainly on visual facts. For example, 12- to 18-month-old infants infer that open eyes are an indicator of seeing by looking longer at an adult when the adult faces an object with open eyes rather than closed eyes [16]. Another fact of vision that is more critical for understanding perspectives is the link between the environment and human perception. For example, when an occluder is opaque, the space behind it cannot be perceived, whereas when an occluder is transparent (or non-existent), a person can see the area behind it. Surian and colleagues [17] showed that 13-month-olds can understand others' perception of an object depending on the presence or absence of an occluder. This looking-time experiment provides the first indications of an emerging knowledge of different perspectives in young infants, namely level 1 perspective-taking, which I will elucidate in the next section.

2.2 Definition and distinction of level 1 and level 2

The basic understanding of *what* an interlocutor sees differently from her own perspective is subsumed under the concept of level 1 perspective-taking [18, 19]. However, when referring to the advanced knowledge of *how* another person perceives something differently from her own perspective, it is referred to as level 2 perspective-taking [18, 19]. The distinction between the levels is illustrated below.

An 18-month-old toddler who has not yet reached level 1 would typically behave as follows [20–22]: She and her caregiver are sitting on opposite sides of a table; the child holds a picture book in her hands and discovers a very interesting picture in it, so she starts pointing to a feature in the picture; the caregiver is not able to see it,

but only detects the cover of the book. Despite the caregiver's nonverbal and verbal indications that she is obviously not perceiving the same thing as the child, the toddler continues to point at the picture without turning it around or bringing it closer to the parent. Thus, the child does not understand that the picture she is pointing at is not visible to the parent. At this stage, the representation of another person's different perspective is not yet formed, and the child only takes into account her own egocentric perspective.

The same child at the age of about 36 months would show the following behaviour [23]. Imagining the same situation; now, the older child puts the picture book on the table and moves it closer to the parent. The parent does see it, but upside down. Obviously, the visibility of the pictures is considered by the child, so she places the book in front of the parent for a shared view. However, by the time the subject has reached a level 2 perspective, she would have rotated the book and thus weighted the mode of representation, which is the case at around 48 months [19]. Instead, the child does not yet conceptualise that people represent objects and scenes from different angles and spatial configurations. Consequently, spatial perspective is still lacking: level 1 but not level 2 has been reached.

In classical VPT-1 tasks there are two complementary forms. The picture book example above illustrates the child's understanding that someone else's perception is inferior to his own. The child then demonstrates her VPT-1 by placing the book on the table [21], so that the parent can finally see what's on the picture—so-called percept production—and thus attend to it jointly with the child. Imagine the parent and child in reversed roles: the parent holds the book, and the child cannot see the pictures inside. But at the same time, she knows that the parent's vision is richer by presenting the parent's perspective in her mind. Sodian and colleagues [4] suggest that it is easier for a child to understand when an interactant perceives more than the child. Thus, it is mastered slightly earlier than when an interactant perceives less. As a result, a clear dichotomy can be defined: one person perceives all the components of the target of interest (pictures), while the other person sees none of them. Here, as in the classic experiments used to assess VPT-1 skills, two-dimensional images are printed on one side of a piece of cardboard, or a barrier blocks the view of three-dimensional objects, so that the setting itself determines the binary of perception. It is important to note that perception in everyday situations is often more diverse and different from this dichotomy in experiments, as it depends on various circumstances such as angles, spatial configuration, and mobility of interactants.

Indeed, using a looking-time paradigm, Sodian et al. [4] pointed out that 14-month-olds can already represent the visual perspective of a person who is not interacting directly with the infant. Here, infants are first familiarised with a person's target and later tested, in accordance with their expectation, where a person directs their grasping movement as a function of their perception—a so-called violation-of-expectation paradigm. A longer duration of gaze to an unexpected grasp when an occluder is transparent reveals the infant's awareness of others' perspective. A more recent study from Japan, using a similar experimental design but more precisely measuring infants' gaze directions and shifts with an eye tracker, showed that even 12-month-olds can represent others' visual perspective [24]. Although these tasks do not assess behaviour in interaction, they give a first idea that children younger than 18 months can cognitively represent another person's perspective.

In what follows, I focus on methods for assessing perceptual production and illustrate young children's responses as described in the literature.

2.3 Tasks for assessing level 1 perspective-taking in interaction

Valid experiments for testing VPT-1 abilities require conflicting perspectives of two communication partners, whose representation is measured in experiments or naturalistic interactions.

In an interactive helping paradigm, 18- and 24-month-olds were faced with an experimenter who was searching for a second toy that she was familiar with from a previous play situation [25]. In the test situation, the infants were able to perceive both toys, whereas the experimenter across from them perceived less because one toy was occluded and one toy was visible from her perspective. The authors counted the number of correct infant responses directed to the target item that was not perceptible to the experimenter. In this scenario, 24-month-olds significantly took the perspective of the experimenter, whereas 18-month-olds did not deviate from chance. There are two aspects of the pragmatics of the test situation that deserve further attention. First, the authors admit that 'the ambiguity of the request created a pragmatically odd situation' ([25], p. 611), because the experimenter repeatedly directed her request to the child instead of searching for the second toy herself, even though she said that she could not find the second toy. In a modified replication study, Viertel [26] disambiguated the pragmatics by changing the verb so that the experimenter told the child that she could not see the second toy and by having the experimenter look around, including where the toys were, in a searching manner. Thus, it was clearly communicated to the child that the experimenter did not have visual access to the hidden object. Second, the authors focused only on responses that involved giving the target item to the experimenter, leaving out all other pragmatically correct responses such as informative pointing or showing [25], which has been modified accordingly in Viertel [26].

Interestingly, after this modest but effective modification, it was found that (a) 18- to 20-month-olds used other means of communication, such as showing or pointing to the target item, significantly more often than giving, and (b) temperamentally shy children outperformed their less shy peers on the VPT-1 test, by (c) using significantly more communicative means from a distance [26]. This example highlights that small changes in the pragmatics of a VPT-1 test can have a significant impact on how children interpret the task, that is, what is expected of them, and how they are able to unfold their social-cognitive competencies and perform in the VPT-1 test. Against the background that shy children in particular are reserved in assessment situations and often do not dare to approach a stranger [27], children's pragmatically appropriate reactions (such as lifting the barrier to reveal the view of the object hidden from the experimenter) are also considered much more important in drawing conclusions about their VPT-1 competencies.

In the following discussion, the focus is narrowed to the assessment of VPT-1 in more natural interactions that is less construed, such as showing a picture or an object to an interlocutor, but which nevertheless presents other pragmatic difficulties.

In a longitudinal study, Girouard and colleagues [20] analysed the patterns they observed in children aged between 18 and 36 months while they were confronted with several VPT-1 tasks. In the so-called bear task, which was largely adapted from Lempers and colleagues [21] and Loveland [22], the child and caregiver were seated across from each other at a table and the child was given a teddy bear with its snout facing the child. The child was then told that her mother wanted to see the bear and that she should show it to her. 18-month-olds tended to show the object mostly horizontally (60%), laying the bear flat on the table so that both (child and mother)

could see the snout. 30% presented it egocentrically, with the snout pointing towards themselves. At 18 months, only 10% of the children showed the bear in a perspectival way (only the parent could see the snout), whereas 2 months later, 100% of the same children showed the bear in this correct orientation. Within this short developmental interval, infants learned to take another person's point of view or to demonstrate their cognitive ability for perspectival behaviour.

A very similar VPT-1 task involves a two-dimensional object printed on a card [21]. The setting itself was similar to the bear task described above. The child was given a one-sided card with a picture on it. The child was then asked to show the picture to the caregiver. The children's presentation pattern was strongly related to the modes found in the bear task. Only 25% of the 18-month-olds and 75% of the 24-month-olds succeeded in this task by presenting the picture exclusively to the recipient, whereas 30 months old children were able to show the object in an adult-like manner. The authors concluded that 18-month-olds very rarely show a picture in an egocentric way, that is, with the side of the picture facing them. Instead, the main behaviour at this age was to hold the picture flat, allowing the child and the parent to look at the picture at the same time (**Figure 1**), which is seen as an intermediate stage between egocentric and perspective showing [20, 21]. Lempers et al. emphasised the categorical distinction between egocentric and horizontal showing in that 'children really were showing because in presenting the picture horizontally to O, they often pointed at the picture and looked at O at the same time as if to make sure she was looking at it. This also makes clear that horizontal showing cannot be labelled egocentric' ([21], p. 20).

Gopnik and colleagues [15] found a similar behaviour in 18-month-olds: they turn a picture back and forth so that the adult sees it once and the child sees it once, and call this phenomenon a transitional stage towards visual perspectivity. In the same vein, a 2-year-old girl was observed to check her mother's vision by walking beside her and looking at the picture she had given her earlier. In doing so, she reassured



Figure 1.
Example of horizontal showing.

herself that her mother could actually see the picture, whereas the child, from her initial position, could not, as the authors interpreted [15].

From 24 months onwards, toddlers gradually use a conventional way of showing by holding up a picture and turning it towards the communication partner.

Below, I challenge the so-called intermediate level and present an alternative explanation for the described patterns of horizontal showing by focusing on the role of the pragmatic frame.

2.3.1 Misinterpretation of the pragmatic frame and proposed modifications

In this subchapter, I argue that the pattern of horizontal sharing of an image with an actor discussed above might rather be encouraged by the pragmatic context itself. In doing so, I take a closer look at the test situations designed to convey the alternative idea of a misinterpretation of the pragmatic frame. I also make some fruitful suggestions for modifying the test situation.

In the above-mentioned test situations [20, 21], the caregiver and the child sit close together at a table, while an experimenter gives the child a picture and asks the child to show it to the caregiver. There is some similarity here at the surface layer to a shared book-reading situation in which the caregiver and child sit close together, attend to pictures jointly and share their impressions of them. Many parents rely on the repetitive structure of joint picture book reading as a format for facilitating children's learning of novel words, even at such young ages as 18 months and earlier [2, 28]. In such formats, children do not act passively—quite the opposite. They often initiate joint attention episodes to elicit a new label from the parent, to name an object themselves, or to share an experience with the caregiver [29].

Referring back to the VPT-1 task, the child is given a new interesting picture, is asked to show it to her mother and often presents it in a sharing way, that is, horizontally. This mode of presentation does not necessarily reflect an immature ability or an intermediate level of perspective-taking. As 'children are on the lookout for familiar frames that help them interpret an ongoing situation' ([2], p. 9), sharing might rather represent the child's pragmatic competence. Children at this age rely on familiar, recurrent interactional structures [30], such as reading books or looking at pictures together, infer the constituents of the situation and thus construct their role within this format [2, 3]. The setting at the table, the proximity of the adult and her lack of nonverbal cues do not allow for the interpretation of a showing format in the sense of holding an object up for a person who initially has no visual access to it. In terms of the pragmatics of the situation, a child can hardly draw the conclusion that the picture should be shown. Since there is no reason for the child to hold up the picture because the adult is sitting close to her, there is more reason to share and look at it together. In fact, physical proximity in young children is often interpreted as a prerequisite for seeing and knowing the same thing together, even if the interactant has a different perspective [31]—this underlines the importance of refraining from a test situation in which the child and the experimenter sit close together at a table. In contrast, increasing the physical distance between the communication partners so that an adult appears as an observer rather than an interactant is based on the feeling that the adult does not share the child's experience of the picture [32, 33].

Furthermore, talking to a child or, more generally, creating an atmosphere of joint social engagement can lure infants into the deception of joint perception [15, 34]. For these reasons, reducing such signs of general involvement may lead to a correct interpretation of the pragmatic frame. Furthermore, the outcome is also influenced

when a parent takes on the role of a recipient in the test situation. In general, it is recommended that parents be present during the warm-up and testing, as their absence may be disruptive to the child and bias the data. However, their involvement in the test situation is problematic in two ways. First, the physical presence of the parent may reinforce the child's assumption that the parent perceives the same as the child. Secondly, and more problematically, there is a rich history of interaction between the child and the parent, which fundamentally influences the interpretation of the deeper meaning of the situation [2].

The results of the modified experiment mentioned above [26] underline the importance of nonverbal and verbal cues that emphasise the pragmatics of a situation in which a person is looking for something to which he has no visual access. It is therefore necessary to distinguish between two phases in a VPT-1 test situation. First, an infant explores an object with an experimenter, for example, a photograph, while another experimenter is completely disengaged and thus obviously not sharing the experience (an exploration phase). Here, the omission of communication symbols supports the impression that the second adult is not part of the shared experience. Shortly afterwards, the initially disengaged person communicates with the child in a searching way to gain visual access to the object (searching phase). Here, the use of nonverbal communication clarifies the search and makes it appear as if the adult does not have visual access to the item, possibly leading to a showing gesture from the child.

In order to meet pragmatic requirements, I present some enhancements that allow an experimental situation to evoke a pragmatic frame of a search situation and thus distinguish it from shared book reading.

1. The role of the caregiver should be that of a companion or an observer, not an addressee. I therefore propose the integration of a sophisticated experimenter who is better suited to the role of the addressee.
2. I propose to minimise the physical co-presence of the addressee by increasing the spatial distance between her and the child. This is achieved by placing the addressee further away from the child and placing a low occluder in front of the child so that they can see each other's upper bodies. Because of the distance of the addressee and the alienation of the table, the situation is not perceived as in a familiar book-reading frame, but as a novel one. This creates a reason to show an object to the addressee instead of looking at it together.
3. Another suggestion is to reduce the addressee's involvement by increasing the spatial distance and, more importantly, by reducing the interaction with the child. In the beginning, the addressee hides behind a magazine and pretends to read. She thus emphasises that she is not involved in the sharing situation, which reduces the shared experience between the child and the addressee.
4. As outlined above, I propose to involve another experimenter who, first of all, attends to the target object together with the child. Second, she asks the child to show the object to the distant experimenter (addressee), who was not initially involved in the sharing during the exploration phase. The addressee should emphasise nonverbally (by moving her upper body) that she is trying to see something by using social cues during the exploration phase.

These suggestions for improvement have been incorporated into Viertel's study [35] and can be found in **Figure 2**.

2.3.2 Results of the modified experiment

In Viertel's study [35], 18- to 20-month-olds were tested for their ability of percept production by administering a picture task (according to [21]) and a bear task (cf. [20–22]) one directly after the other, with the modifications described in Section 2.3.1. In this way, the high proportion of responses previously described as 'intermediate' [20, 21] should be reduced, as the pragmatic frame for the children clearly deviated from a shared book-reading situation.

The children's reactions in relation to VPT-1 were classified into five categories:

- a. The child showed no intentional response to orient the target towards the correct addressee (the experimenter) – no target reaction.
- b. The child oriented the target non-specifically, that is, neither the child nor the addressee could see the side of the picture or the bear's snout (because the picture was rotated or presented at an unfavourable angle) – non-specific.
- c. The target was oriented so that only the child could see the side of the picture or the bear's snout – egocentric (**Figure 3**).
- d. The orientation of the target object was such that it was visible to both participants at the same time, either horizontally or by presenting it in an ambiguous way, for example, by rapidly changing the mode of presentation of the picture by turning it back and forth [15] – ambivalent (**Figure 1**).
- e. The object was oriented towards the addressee, so that she could perceive it only by herself – perspectively (**Figure 4**).



Figure 2. *Modifications of the pragmatic frame in the VPT-1 experimental set-up (at the end of the exploration phase).*



Figure 3.
Example of egocentric pointing.



Figure 4.
Example of perspective showing.

The findings of the study were as follows: In the picture task, the children most often showed a clearly egocentric response (almost 40%), but very rarely oriented the picture perspectively towards the addressee (6%). The proportions were similar in the bear task, where about 36% of the children demonstrated an egocentric orientation and 11% displayed a perspective orientation towards the addressee. This distribution pattern is quite identical to that of Girouard et al. [20].

Interestingly, however, compared to the original studies, ambivalent reactions were not as frequent, with 16% in the bear task (cf. 60% in [20]) and 18% in the picture task (cf. ‘main behaviour’ instead of egocentric in [21]). In this case, the behavioural components of the modified pragmatic frame probably allowed for a

better insight into the deeper meaning of the format; for example, children could infer that an object should be shown to the addressee rather than shared with her.

The fact that there was also relatively often no target reaction to the addressee (pictures: almost 33%, bear: almost 38%) was a rather surprising result, whereas only two children showed an unspecific orientation in the picture task. These children probably relied on familiar interaction protocols and communicated with their caregivers or with the experimenter sitting next to the child instead of trying to show the target object to the addressee. In these cases, VPT-1 could not be measured because the children and the 'false addressee' had the same perspective on the target item, resulting in the high proportion of no target responses. A possible reason for this could be the novelty of the frame, which contained many new elements that made the whole situation unfamiliar, and which involved three possible addressees, so that the children were not sure with whom they should communicate. Future studies using this method can improve the interaction by including a trial in which the child is familiarised with this specific new frame.

3. Conclusions

In this chapter, I addressed the question of whether a more pragmatic modification of the classical test situations of VPT-1 could better account for children's cognitive abilities of level 1 perspective-taking. The criticism related to the pragmatics of the test format, which, for example, resembled shared book reading. Accordingly, I argued that this form of interaction tended to capture children's specific pragmatic competencies rather than validly assessing their cognitive abilities. Focusing on the concept of pragmatic frames highlights the inter-individual history of interactions that each child brings to the test situations. This means that existing similarities to familiar frames are likely to activate interactional protocols, but also that perceived similarities of an interaction at a surface level can trigger a particular interpretation of the pragmatics of the situation, such as the discussed misinterpretation of a joint book reading format leading to linked behavioural patterns, or in other cases to a confused, inhibited or uncooperative child. When designing VPT-1 experiments, choosing the components very carefully in terms of the interactants involved and their roles, the spatial configurations, the type of interactions, the nonverbal communication signals, and the choice of words can make a big difference in how transparent the depth structure is to the children and which interactional protocols are being invoked.

However, all of the reported findings stem from studies in Western cultures, where joint book reading with young children is a socially highly valued activity and often occurs on a daily basis in Western families, which is not always the case in non-Western countries and communities [36]. For example, in some cultures, early reading with young children is underrepresented compared to non-reading activities [37, 38] or begins about a year later than in typical Western countries [39]. In addition, in more indigenous cultures, general access to books is very limited and other community activities take priority [40]. This means that at an early age children from other cultures sometimes have little or no experience of joint book reading with their caregivers, so it seems unlikely that this pragmatic frame would be activated. With this in mind, it is problematic to generalise the findings to non-Western cultures. In this respect, a vital question that would enrich the research landscape in this area is how children from other cultures who have little or no access to books in their early

development would behave in the classic VPT-1 tasks that resemble joint book reading, and whether there would also be a change in their responses if the pragmatic frame were modified as described in Section 2.3.1. It would also be interesting to explore how children's responses might alter over time as they gain experience of shared book reading in terms of a developmental trajectory.

In addition, I will focus on another possible pragmatic frame emerging from gesture development research: an intercultural study examined the emergence of prelinguistic deictic gestures in 8- to 15-month-olds [41]. Video analysis revealed that, apart from pointing, the nonverbal behaviours of offering and showing were common and coded as separate categories, even though they appear very similar on the surface. While offering is defined as '[h]and holds an object that is brought close to a person, so she can take it', showing can be defined as '[h]and holds out an object, arm is extended toward a person' ([41], p. 1301). Furthermore, the offering gesture was used two to three times per hour in daily activities by Dutch children who are culturally close to the children in Viertel's study [35]. In fact, the modified experiment created a framework that could have prompted the offering of an object to the addressee. Here, a social partner signals non-verbally (often very subtly) that she is interested in an activity or an object. Thus, an offering frame is less demanding than a giving frame, in which an interlocutor directs a 'Give it to me' instruction to the child. Although in the modified experiment the experimenter asked the children to show the object to the addressee rather than offer it to her, the setting itself could have encouraged them to help the social partner and reach over the barrier, not only to provide visual access but also to make the object more physically accessible to her. Some children stretched to lift the object over the barrier, while others stood up from the parent's lap, approached the addressee with an outstretched hand and tried to offer the object to her. Often in these cases, the object wasn't turned around properly to allow adequate visual access. Thus, the modified frame could have been misinterpreted as an invitation to offer the item.

In the same study, the authors also showed that early gestural communication is shaped in social-interactive experiences and differs between indigenous, typically Western, and Far Eastern cultures in 8- to 15-month-olds [41]. For example, Yucatec-Mayan parents used the showing gesture in social interaction with their infants less often than Dutch parents, who in turn used it less frequently than Shanghai-Chinese parents. Exactly the same rank pattern was found for their infants. This finding could inspire the design of future VPT-1 tests in non-Western cultures, insofar as a differently developed repertoire of key gestures (e.g. showing) would set the threshold for demonstrating their social-cognitive abilities.

Finally, this chapter has only examined behavioural measures of VPT-1 abilities, but it is worth looking more closely at methods that assess implicit perspective-taking (e.g. [4, 24]). However, Ruffman and Perner [42] question the results of violation-of-expectation tasks, albeit in the context of testing others' false beliefs, suggesting that infants' longer gaze durations do not necessarily indicate a representation of others' beliefs, but can also be interpreted as the perception of different subject-object-location associations. Furthermore, infants may be guided by simple behavioural rules that allow them to predict the behaviour of others—even without attributing a different perception to them. In summary, the reasons why infants mostly look at the unexpected event can be manifold, and it remains speculative whether a so-called implicit ability of VPT-1 is being assessed. Although current research uses electrophysiological methods in adults [43, 44], this has not yet been done in children. Future research in this area would certainly be informative to find out whether brain

areas associated with perspective-taking are active in infants or very young children or whether other processing is involved instead of implicit perspective-taking.

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Chat-GPT Feedback: Fostering Growth in English Writing Abilities among Students

Mansye Sekewael and Karolis Anaktototy

Abstract

Integrating artificial intelligence (AI) in education has transformed traditional teaching by providing interactive and personalized learning opportunities. This study investigates the impact of Chat-GPT, an advanced language model, on improving English writing skills among 10 secondary school students in Ambon City, Maluku, Indonesia. Utilizing a mixed-methods approach, the research incorporated qualitative interviews, surveys, and quantitative analysis of students' writing portfolios to evaluate the effectiveness of AI-generated feedback. The results revealed that Chat-GPT significantly enhanced students' writing skills through personalized, real-time feedback, which led to notable improvements in grammar, vocabulary, and self-editing capabilities. Principal component analysis (PCA) identified three key factors contributing to skill development: (1) overall improvement in writing quality, including better coherence and creativity; (2) technical proficiency in grammar, sentence structure, and editing; and (3) user satisfaction with the platform and the perceived value of its feedback. Furthermore, correlation analysis demonstrated a positive association between frequent Chat-GPT use and enhanced coherence and technical precision in written work. Qualitative feedback highlighted students' appreciation for contextualized, interactive feedback and a preference for features supporting real-time collaboration. The study advocates for the responsible integration of AI in education to foster self-directed learning and improve linguistic competencies.

Keywords: chat-GPT, artificial intelligence, English writing skills, personalized learning, AI-driven feedback

1. Introduction

Integrating Artificial Intelligence (AI) into education has changed conventional teaching methodologies and opened up a world of possibilities for improving learning experiences. Chat-GPT and other AI technologies are not just tools but gateways to interactive and personalized learning opportunities previously beyond our reach [1, 2]. These developments have created an adaptive and engaging environment, empowering students and teachers to explore the full potential of AI for various academic purposes.

In particular, Chat-GPT, a potent language model, facilitates the acquisition of the English language by providing personalized assistance and real-time feedback. Offering immediate corrections, suggestions, and explanations fosters a more profound comprehension of language subtleties, thereby assisting students in enhancing their writing abilities [3, 4]. This interactive feedback mechanism assists students in recognizing and correcting errors, thereby improving their writing abilities over time [5, 6].

Despite these benefits, implementing Chat-GPT in classrooms poses a multitude of obstacles. These encompass ethical concerns, potential over-reliance, and the need for a balanced approach to integration into the curriculum [7, 8]. Teachers must navigate these challenges and balance technology and human interaction by ensuring that AI tools are used as supplements rather than replacements for traditional teaching methods [9, 10].

While the benefits of Chat-GPT in educational settings are evident, there is a pressing need for a deeper understanding of how AI-driven feedback contributes to the explicit development of students' English writing skills. The current literature primarily focuses on AI tools' immediate benefits and challenges [11, 12]. However, more comprehensive research must be conducted to investigate the long-term effects of Chat-GPT feedback on students' language proficiency and writing development. This research is not just a matter of academic interest but a crucial step in ensuring AI's responsible and effective use in education.

To address this gap, further research is needed to explore how continuous interaction with Chat-GPT over extended periods impacts students' writing abilities. This encompasses the examination of enhancements in their capacity to construct coherent arguments, utilize sophisticated vocabulary, and uphold appropriate grammar and syntax [4, 6]. Furthermore, the efficacy of AI feedback in promoting sustained growth can be elucidated by examining students' perceptions of their progress and confidence levels in writing [5, 9].

2. Mechanics of Chat-GPT feedback

The Mechanics of Chat-GPT Feedback encompasses a sophisticated process grounded in advanced natural language processing (NLP) techniques, particularly leveraging the Transformer architecture. Chat-GPT operates by analyzing text inputs and generating responses that mimic human-like language, ensuring its ability to understand and produce contextually appropriate feedback. This capability is crucial in educational contexts, as Zhang [13] noted, where Chat-GPT enhances learner agency through personalized feedback tailored to individual writing styles and linguistic needs. What is more, this adaptability is invaluable in multilingual environments, accommodating students' varying proficiency levels and linguistic backgrounds, thereby fostering an inclusive and diverse learning environment.

Harunasari [14] further emphasizes that Chat-GPT's integration into English as a Foreign Language (EFL) writing supports students by providing real-time corrections and suggestions, enhancing writing accuracy and fluency. Wang [6] underscores its universal applicability by highlighting its effectiveness for both native and non-native English speakers, demonstrating its significant role in improving overall writing proficiency across diverse student populations. The consistent and unbiased feedback provided by Chat-GPT, as observed by Octavio et al. [15], supports teachers in

instructional tasks and empowers students to engage more deeply in their learning processes, leading to a noticeable improvement in their writing skills.

Chat-GPT's feedback mechanisms are unique and versatile, encompassing direct, constructive, and interactive feedback. Direct feedback, as detailed by Zhang [13], promptly addresses grammatical and spelling errors, enabling students to correct mistakes immediately. Constructive feedback, highlighted by Wang [6], goes beyond error identification, providing explanations and alternatives that deepen students' understanding of language usage. Interactive feedback, as observed by Octavio et al. [15], fosters a dynamic interaction between students and the AI, encouraging iterative learning and building confidence in writing skills over time.

Despite its benefits, challenges such as dissonance among students regarding AI use [8] and the need for thoughtful integration into curricula [16] underscore the importance of nuanced implementation strategies. Gozali et al. [3] suggest integrating Chat-GPT into automated writing evaluation frameworks can enhance students' feedback literacy, address concerns, and maximize educational benefits. This comprehensive approach to the Mechanics of Chat-GPT Feedback not only optimizes its utility in educational settings but also significantly enhances student engagement and learning outcomes in English writing courses.

3. Enhancing writing skills through Chat-GPT

To ensure whether students can enhance their English writing abilities using Chat-GPT, we conducted a comprehensive study. Our research employed a mixed-methods approach to thoroughly analyze the impact of Chat-GPT feedback on the development of English writing skills among secondary school students in Ambon City, Maluku Province, Indonesia. Through a rigorous process of purposive sampling. The participants were carefully selected through purposive sampling based on specific criteria: intermediate to upper-intermediate English proficiency (B1-B2 on the Common European Framework of Reference for Languages), an age range of 16–17, active involvement in writing activities such as assignments or extracurricular writing clubs, and basic technological literacy to ensure they could interact effectively with Chat-GPT.

We focused on students aged 16–17 for several vital reasons. At this age, students typically possess more advanced cognitive development, including critical thinking and analytical skills necessary for engaging with and evaluating AI-generated feedback. Additionally, the Indonesian curriculum emphasizes advanced writing skills in the penultimate and final years of secondary education, which aligns with the participants' academic stage. This specific age range also helped maintain consistency in the participants' educational backgrounds and exposure to English writing instruction. Furthermore, this group was mature enough to provide informed consent for their involvement in the study while still fitting within the secondary school demographic. This methodological rigor ensured a focused and relevant group, which is crucial for accurate and applicable study outcomes. Two main research questions guided our investigation: To what extent does Chat-GPT feedback contribute to the development of English writing skills, and how does this feedback enhance those skills?

Our study employed various qualitative and quantitative research instruments to address these questions. Interviews, structured surveys, and focus group discussions provided qualitative insights into students' perceptions and experiences with

Chat-GPT feedback. Concurrently, document analysis and direct classroom observations offered quantitative data on writing ability changes before and after Chat-GPT feedback exposure. By compiling and analyzing writing portfolios, we longitudinally tracked students' writing skill improvements, examining grammar usage, vocabulary enhancement, self-editing practices, and error identification efficiency over an extended period. Principal Component Analysis (PCA) was utilized to identify key factors influencing writing skill development through Chat-GPT feedback. At the same time, correlation analysis investigated the relationship between feedback frequency and writing skill enhancement.

The findings of our research are detailed as follows:

We did a three-part study to find out how much Chat-GPT helps students improve their English writing: descriptive statistics, an analysis of the factors that affect writing skills with the help of Chat-GPT, and a correlation analysis to find out how often students use Chat-GPT and how that affects their writing skill improvement.

3.1 Descriptive statistical analysis

Table 1 shows the results of a meticulous descriptive statistical analysis of a survey designed to assess the impact of Chat-GPT usage on students' English writing skills. The survey, comprising 11 questions, was crafted with a deep understanding of second language learning theories, writing pedagogy, and technology-enhanced language learning theories. These questions delved into various writing skills, including the ability to write in general and specific areas such as vocabulary, grammar, and self-editing.

The question design was based on several significant theories, such as the Cognitive Process Theory of Writing [17], the Sociocultural Theory of Language Learning [18], Self-Efficacy Theory [19], Second Language Acquisition Theory [20], and the Technology Acceptance Model [21]. Each question was purposefully crafted to evaluate a specific aspect of writing skills or the experience of using Chat-GPT, ensuring a comprehensive evaluation of this AI tool's influence on students' writing skill development.

All questions were designed to employ a five-point Likert scale, which ensured a more detailed and nuanced statistical analysis. **Table 1**, which provides a comprehensive overview of the survey results, is presented below.

Based on the findings presented in **Table 1**, there is a significant improvement in students' overall English writing skills after using Chat-GPT, particularly in the category of "Overall Improvement and Data Usage." Students reported a noticeable enhancement in their writing quality, with an average score of 3.80 for question 1 (Q1). This improvement is complemented by a moderate frequency of Chat-GPT use for writing tasks, with an average score of 3.40 on question 2 (Q2), indicating consistent engagement with the tool. Furthermore, the survey results highlight a significant increase in students' confidence when tackling complex writing tasks such as essay writing, creative writing, and research papers (Q5, average = 3.90), suggesting that Chat-GPT has a positive impact on students' self-efficacy in writing.

This improvement extends beyond general writing skills to more specific writing abilities. The use of Chat-GPT facilitated moderate improvements in grammar and sentence structure (Q4, average = 3.30) as well as vocabulary expansion (Q6, average = 3.30). The tool also positively influenced students' ability to express ideas coherently (Q3, average = 3.00) and enhanced their self-editing skills (Q8, average = 3.10). These findings underscore the comprehensive support that Chat-GPT

Questions	Response type	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation				
									Statistic	Statistic	Statistic	Statistic
1. How much has your overall English writing ability improved after using Chat-GPT?	5-point Likert scale (1: Not at all – 5: Significantly)	10	3	2	5	38	3.80	0.327	1.033			
2. How frequently do you use Chat-GPT feedback for your writing assignments?	5-point Likert scale (1: Very dissatisfied – 5: Very satisfied)	10	4	1	5	34	3.40	0.400	1.265			
3. To what extent has Chat-GPT improved your ability to express ideas coherently?	5-point Likert scale (1: Not at all – 5: Significantly)	10	4	1	5	30	3.00	0.422	1.333			
4. How much has your grammar and sentence structure improved with Chat-GPT feedback?	5-point Likert scale (1: Not helpful – 5: Very helpful)	10	4	1	5	33	3.30	0.396	1.252			
5. How confident do you feel tackling complex writing tasks after using Chat-GPT?	5-point Likert scale (1: Not at all – 5: Significantly)	10	3	2	5	39	3.90	0.314	0.994			
6. To what extent has Chat-GPT enhanced your vocabulary and word choice?	5-point Likert scale (1: Not user-friendly – 5: Very user-friendly)	10	3	2	5	33	3.30	0.396	1.252			
7. How satisfied are you with the feedback provided by Chat-GPT?	5-point Likert scale (1: Not at all – 5: Significantly)	10	4	1	5	35	3.50	0.373	1.179			
8. How much have your self-editing skills improved after using Chat-GPT?	5-point Likert scale (1: Very dissatisfied – 5: Very satisfied)	10	4	1	5	31	3.10	0.379	1.197			
9. How helpful is Chat-GPT in identifying and correcting errors in your writing?	5-point Likert scale (1: Not at all – 5: Significantly)	10	3	2	5	41	4.10	0.314	0.994			
10. To what extent has Chat-GPT encouraged you to explore different writing styles and genres?	5-point Likert scale (1: Not helpful – 5: Very helpful)	10	4	1	5	34	3.40	0.521	1.647			
11. How user-friendly do you find the Chat-GPT interface?	5-point Likert scale (1: Not at all – 5: Significantly)	10	2	2	4	32	3.20	0.249	0.789			

Table 1.
 Descriptive statistical analysis.

provides across various aspects of writing, instilling confidence in its effectiveness and the benefits it offers in both technical writing skills and broader writing capabilities.

In addition to skill improvement, the survey results revealed that students generally had a positive user experience with Chat-GPT. They expressed moderate satisfaction with the feedback provided by the tool (Q7, average = 3.50), instilling confidence in its usability. They also found the interface user-friendly (Q11, average = 3.20). More importantly, students found Chat-GPT to be highly effective in helping them identify and correct errors in their writing (Q9, average = 4.10), a critical factor in developing their self-editing skills.

Another noteworthy finding is that Chat-GPT encouraged students to explore different writing styles and genres at a moderate level, meaning they could experiment with different styles and genres but not to an extensive degree (Q10, average = 3.40). This suggests that the tool not only enhances technical aspects of writing but also fosters creativity and diversity in students' writing approaches. The standard deviation across all questions shows considerable variability in responses, reflecting students' diverse individual experiences with Chat-GPT, indicating that the tool's impact varied depending on the student's level of engagement and context.

3.2 Exploring multifaced factors shaping writing skills through Chat-GPT assistance

To discern the primary contributing factors to the enhancement of writing skills, we employed Principal Component Analysis (PCA) data utilizing Varimax rotation with Kaiser normalization. The outcomes are delineated in **Table 2**.

The data from Principal Component Analysis (PCA) using Varimax rotation with Kaiser normalization is a significant tool that thoroughly explains the insights gained from the main contributors to improving writing skills through Chat-GPT feedback. The commonalities between questionnaire items and factors demonstrate a strong relationship between the variables, allowing for the use of the data for factor analysis.

	Communalities			Component Matrix		
	Initial	Extraction		1	2	3
Q1	1.000	0.969	Q1	0.961	0.182	0.108
Q2	1.000	0.839	Q2	0.109	0.050	0.908
Q3	1.000	0.907	Q3	0.539	0.783	0.061
Q4	1.000	0.892	Q4	0.110	0.214	0.914
Q5	1.000	0.942	Q5	0.945	0.215	0.057
Q6	1.000	0.964	Q6	0.618	0.758	0.079
Q7	1.000	0.913	Q7	0.784	0.327	0.438
Q8	1.000	0.942	Q8	0.269	0.710	0.605
Q9	1.000	0.762	Q9	0.647	0.436	0.392
Q10	1.000	0.951	Q10	0.054	0.962	0.148
Q11	1.000	0.661	Q11	0.570	0.066	0.575

Table 2.
Factors shaping writing skills through Chat-GPT assistance.

The following Rotated Component Matrix identifies three discrete factors crucial in clarifying skill improvement's intricacies via Chat-GPT feedback.

3.2.1 Extensive skill development

The initial factor, which is comprised of substantial loadings from Q1 (representing overall improvement), Q5 (representing confidence in tackling complex tasks), and Q10 (promoting exploration of styles and genres), encompasses a wide-ranging improvement in writing abilities. This finding suggests that Chat-GPT's feedback significantly improves the writing's overall quality, including structural and creative aspects. Participants report experiencing a significant improvement in their capacity to express ideas logically and their self-assurance when confronted with complex writing assignments. Promoting diverse writing styles and genres strengthens this element's multifaceted character, providing a comprehensive view of the writing skill improvement process.

3.2.2 Usage and technical proficiency

Q2 (frequency of Chat-GPT usage), Q4 (improvement in grammar and sentence structure), and Q8 (improvement in self-editing skills) have the most significant impact on Factor 2. This aspect highlights the technical nature of developing writing skills. Respondents who reported consistent Chat-GPT use with perceptible improvements in grammar, sentence structure, and self-editing abilities significantly contributed to this factor. This suggests a correlation between the regular use of Chat-GPT for writing assignments and a specific aspect of technical proficiency.

3.2.3 Qualitative expression and user experience

Focusing on the quality aspects of writing skill improvement, Factor 3 is set apart. It is made up of scores from Questions 3 (coherent expression), Question 6 (effects on vocabulary and word choice), Question 7 (satisfaction with feedback), and Question 11 (usability of the interface). This factor posits that the combined impact of coherent expression, vocabulary, user satisfaction, and interface user-friendliness contributes to a discernible aspect of the perception of writing skill improvement. In addition to technical expertise, respondents emphasize qualitative elements that augment the overall user experience when utilizing Chat-GPT.

3.3 Correlation analysis

According to the survey results, a correlation analysis was carried out to look into the possible link between how often Chat-GPT was used and the improvement of writing skills. Based on the calculations, Kendall's tau_b and Spearman's rho correlation coefficients were found, taking into account both the 0.05 and 0.01 significance levels, as shown in **Table 3**.

Based on the Principal Component Analysis (PCA) results shown in **Table 3**, three key components influence the improvement of writing skills through Chat-GPT use. The first component, "Overall Writing Ability Improvement," highlights that Chat-GPT significantly enhances writing skills holistically. It not only helps users improve writing quality and express ideas coherently but also encourages them to explore various writing styles. This suggests that Chat-GPT is not just a technical tool, but a

Correlations												
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	
Kendall's tau_b	Correlation Coefficient	1.000	0.081	0.514	0.082	0.930**	0.551	0.704*	0.379	0.696*	0.219	0.501
	Sig. (two-tailed)	.	0.772	0.066	0.770	0.001	0.058	0.014	0.176	0.016	0.435	0.087
	N	10	10	10	10	10	10	10	10	10	10	10
Q2	Correlation Coefficient	0.081	1.000	0.158	0.613*	0.000	0.254	0.274	0.500	0.282	0.213	0.373
	Sig. (two-tailed)	0.772	.	0.566	0.026	1.000	0.374	0.329	0.069	0.320	0.440	0.195
	N	10	10	10	10	10	10	10	10	10	10	10
Q3	Correlation Coefficient	0.514	0.158	1.000	0.293	0.603*	0.875**	0.658*	0.658*	0.678*	0.667*	0.344
	Sig. (two-tailed)	0.066	0.566	.	0.288	0.032	0.002	0.019	0.017	0.017	0.016	0.231
	N	10	10	10	10	10	10	10	10	10	10	10
Q4	Correlation Coefficient	0.082	0.613*	0.293	1.000	0.028	0.315	0.389	0.560*	0.315	0.270	0.523
	Sig. (two-tailed)	0.770	0.026	0.288	.	0.921	0.273	0.168	0.043	0.270	0.330	0.070
	N	10	10	10	10	10	10	10	10	10	10	10
Q5	Correlation Coefficient	0.930**	0.000	0.603*	0.028	1.000	0.618*	0.657*	0.411	0.706*	0.250	0.359
	Sig. (two-tailed)	0.001	1.000	0.032	0.921	.	0.034	0.022	0.143	0.015	0.375	0.222
	N	10	10	10	10	10	10	10	10	10	10	10
Q6	Correlation Coefficient	0.551	0.254	0.875**	0.315	0.618*	1.000	0.794**	0.762**	0.667*	0.773**	0.462
	Sig. (two-tailed)	0.058	0.374	0.002	0.273	0.034	.	0.007	0.008	0.024	0.007	0.123
	N	10	10	10	10	10	10	10	10	10	10	10
Q7	Correlation Coefficient	0.704*	0.274	0.658*	0.389	0.657*	0.794**	1.000	0.576*	0.500	0.472	0.807**
	Sig. (two-tailed)	0.014	0.329	0.019	0.168	0.022	0.007	.	0.040	0.085	0.094	0.006
	N	10	10	10	10	10	10	10	10	10	10	10
Q8	Correlation Coefficient	0.379	0.500	0.658*	0.560*	0.411	0.762**	0.576*	10.000	0.762**	0.747**	0.344
	Sig. (two-tailed)	0.176	0.069	0.017	0.043	0.143	0.008	0.040	.	0.007	0.007	0.231
	N	10	10	10	10	10	10	10	10	10	10	10

Correlations													
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11		
Q9	Correlation Coefficient	0.696*	0.282	0.678*	0.315	0.706*	0.667*	0.500	0.762**	1.000	0.515	0.277	
	Sig. (two-tailed)	0.016	0.320	0.017	0.270	0.015	0.024	0.085	0.007	.	0.071	0.351	
	N	10	10	10	10	10	10	10	10	10	10	10	
Q10	Correlation Coefficient	0.219	0.213	0.667*	0.270	0.250	0.773**	0.472	0.747**	0.515	1.000	0.232	
	Sig. (two-tailed)	0.435	0.440	0.016	0.330	0.375	0.007	0.094	0.007	0.071	.	0.420	
	N	10	10	10	10	10	10	10	10	10	10	10	
Q11	Correlation Coefficient	0.501	0.373	0.344	0.523	0.359	0.462	0.807**	0.344	0.277	0.232	1.000	
	Sig. (two-tailed)	0.087	0.195	0.231	0.070	0.222	0.123	0.006	0.231	0.351	0.420	.	
	N	10	10	10	10	10	10	10	10	10	10	10	
Q1	Spearman's rho	Correlation Coefficient	1.000	0.117	0.628	0.098	0.951**	0.653*	0.772**	0.447	0.725*	0.320	0.552
	Sig. (two-tailed)	.	0.749	0.052	0.788	0.000	0.040	0.040	0.009	0.196	0.018	0.367	0.098
	N	10	10	10	10	10	10	10	10	10	10	10	10
Q2	Correlation Coefficient	0.117	1.000	0.218	0.693*	0.026	0.324	0.311	0.564	0.346	0.249	0.427	
	Sig. (two-tailed)	0.749	.	0.545	0.026	0.943	0.362	0.383	0.089	0.328	0.487	0.218	
	N	10	10	10	10	10	10	10	10	10	10	10	
Q3	Correlation Coefficient	0.628	0.218	1.000	0.382	0.706*	0.925**	0.732*	0.788**	0.785**	0.783**	0.400	
	Sig. (two-tailed)	0.052	0.545	.	0.276	0.023	0.000	0.016	0.007	0.007	0.007	0.252	
	N	10	10	10	10	10	10	10	10	10	10	10	
Q4	Correlation Coefficient	0.098	0.693*	0.382	1.000	0.030	0.420	0.459	0.638*	0.359	0.346	0.600	
	Sig. (two-tailed)	0.788	0.026	0.276	.	0.935	0.227	0.182	0.047	0.308	0.327	0.067	
	N	10	10	10	10	10	10	10	10	10	10	10	
Q5	Correlation Coefficient	0.951**	0.026	0.706*	0.030	1.000	0.707*	0.733*	0.451	0.722*	0.337	0.401	
	Sig. (two-tailed)	0.000	0.943	0.023	0.935	.	0.022	0.016	0.191	0.018	0.342	0.250	
	N	10	10	10	10	10	10	10	10	10	10	10	

Correlations												
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	
Q6	Correlation Coefficient	0.653*	0.324	0.925**	0.420	0.707*	1.000	0.849**	0.832**	0.743*	0.840**	0.529
	Sig. (two-tailed)	0.040	0.362	0.000	0.227	0.022	.	0.002	0.003	0.014	0.002	0.116
	N	10	10	10	10	10	10	10	10	10	10	10
Q7	Correlation Coefficient	0.772**	0.311	0.732*	0.459	0.733*	0.849**	1.000	0.608	0.570	0.554	0.864**
	Sig. (two-tailed)	0.009	0.383	0.016	0.182	0.016	0.002	.	0.062	0.086	0.096	0.001
	N	10	10	10	10	10	10	10	10	10	10	10
Q8	Correlation Coefficient	0.447	0.564	0.788**	0.638*	0.451	0.832**	0.608	1.000	0.864**	0.854**	0.414
	Sig. (two-tailed)	0.196	0.089	0.007	0.047	0.191	0.003	0.062	.	0.001	0.002	0.235
	N	10	10	10	10	10	10	10	10	10	10	10
Q9	Correlation Coefficient	0.725*	0.346	0.785**	0.359	0.722*	0.743*	0.570	0.864**	1.000	0.675*	0.311
	Sig. (two-tailed)	0.018	0.328	0.007	0.308	0.018	0.014	0.086	0.001	.	0.032	0.381
	N	10	10	10	10	10	10	10	10	10	10	10
Q10	Correlation Coefficient	0.320	0.249	0.783**	0.346	0.337	0.840**	0.554	0.854**	0.675*	1.000	0.296
	Sig. (two-tailed)	0.367	0.487	0.007	0.327	0.342	0.002	0.096	0.002	0.032	.	0.406
	N	10	10	10	10	10	10	10	10	10	10	10
Q11	Correlation Coefficient	0.552	0.427	0.400	0.600	0.401	0.529	0.864**	0.414	0.311	0.296	1.000
	Sig. (two-tailed)	0.098	0.218	0.252	0.067	0.250	0.116	0.001	0.235	0.381	0.406	.
	N	10	10	10	10	10	10	10	10	10	10	10

*. Correlation is significant at the 0.05 level (two-tailed). **. Correlation is significant at the 0.01 level (two-tailed).

Table 3.
Factors shaping writing skills through Chat-GPT assistance.

platform that fosters creativity and flexibility in writing, inspiring users to push their boundaries and explore new horizons in their writing.

The second component, “Technical Proficiency in Grammar and Self-Editing,” focuses on technical aspects such as grammar improvement and the ability to self-edit. Chat-GPT’s feedback on grammatical errors, sentence structure, and syntax is not just effective, but it also empowers students to become more critical of their writing, enhancing their ability to independently identify and correct mistakes.

The third component, “User Satisfaction with the Interface,” while not directly related to writing skills, plays a crucial role in the overall effectiveness of Chat-GPT as a learning tool. A user-friendly interface and responsive feedback are key factors in increasing user satisfaction. This, in turn, leads to more frequent and effective use, contributing to consistent improvements in writing skills. It is a clear demonstration that comfort and satisfaction with the tool encourage continuous learning and skill development.

4. Students’ perception and experiences

This study has uncovered a significant positive correlation between students’ perceptions of using Chat-GPT and their improvement in analytical skills, particularly in writing. Dinda, a student participant, shared her experience, stating, “Chat-GPT facilitated quick and relevant feedback, which significantly enhanced my writing skills.” This aligns with our findings, indicating that students who view the AI tool positively tend to see a marked increase in their writing scores. Quantitative data further supports this, revealing that students who reported high satisfaction with Chat-GPT demonstrated accelerated progress in their writing abilities.

Additionally, we found that the frequency of Chat-GPT usage directly correlates with writing skill improvement. Rafi, another participant, noted, “The more I use Chat-GPT, the more confident I become in structuring my writing.” This observation is supported by data showing that students who consistently use Chat-GPT demonstrate significant improvement in their writing, particularly in grammar and sentence structure. Quantitative results further reinforce this, highlighting a positive relationship between regular use of Chat-GPT and faster improvement in writing skills.

Customization emerged as another critical factor influencing students’ learning outcomes. Sofie mentioned, “I can tailor the feedback from Chat-GPT to my needs, especially to improve sentence structure and grammar.” Interview data revealed that students who utilized the customization features of Chat-GPT experienced more significant improvements in specific writing skills, such as grammar. Quantitative analysis shows that these students scored higher in grammar and sentence structure assessments, underscoring the importance of personalized learning tools in enhancing writing abilities.

Another notable advantage of Chat-GPT that students appreciated was contextual feedback. During her interview, Karen stated, “Chat-GPT helps me understand how context affects how I structure my sentences.” Observational data supports this, as students who valued contextual feedback tended to write more coherently and with better structure. Quantitative results also showed significant improvement in the quality of their writing, particularly in coherence and narrative flow, emphasizing that AI capable of providing context-based feedback can enhance the overall quality of writing.

One intriguing aspect of our research was the role of Chat-GPT in students’ vocabulary development. Reinhard, for instance, noted, “I notice my vocabulary

expanding each time I interact with Chat-GPT due to exposure to new words.” Quantitative data supports this, showing that students who engaged more with Chat-GPT experienced significant increases in their vocabulary usage. This underscores the AI tool’s dynamic interaction capabilities in helping students explore and expand their vocabulary.

Furthermore, our research revealed that Chat-GPT usage led to an increase in students’ writing confidence. Joy expressed, “With Chat-GPT, I feel more confident in tackling complex essay topics.” This finding is supported by observational data showing a correlation between students’ increased confidence and the complexity of their writing. Students who felt more confident using the AI tool tended to produce more sophisticated and nuanced writing, as seen in the quantitative evaluation of their written work.

The multilingual support offered by Chat-GPT was another significant benefit appreciated by the students. Sofie, who is also learning another language, shared, “The multilingual feature of Chat-GPT is a game-changer for me, helping me transfer writing skills from one language to another.” Quantitative data revealed that students who appreciated this multilingual support demonstrated better skill transfer between languages, reinforcing Chat-GPT’s potential to aid in cross-linguistic learning and skill transfer.

Lastly, the students highly appreciated Chat-GPT’s adaptive learning feature. Dinda stated, “I like how Chat-GPT adjusts its feedback according to my level.” Observational data showed that students who valued this feature experienced a faster and more consistent development curve in their writing skills. Longitudinal quantitative analysis confirmed that AI systems adapting to individual progress can significantly optimize learning outcomes.

5. Conclusion, further direction and recommendation

In conclusion, this study has made a unique contribution to education and technology by demonstrating the significant role of Chat-GPT feedback in enhancing the English writing skills of secondary school students in Ambon City, Indonesia. The findings reveal substantial improvements in critical grammar, vocabulary usage, and self-editing skills. Moreover, students displayed increased confidence in handling complex writing tasks, showing greater coherence and technical proficiency in their written expression, which is strongly associated with frequent use of Chat-GPT. These outcomes are consistent with previous research that underscores the positive impact of AI-driven tools on linguistic proficiency [22, 23], reinforcing the potential of Chat-GPT as a practical learning aid.

For future research, it is crucial to conduct longitudinal studies to assess the long-term impact of Chat-GPT feedback on the continuous development of writing skills. These studies can further explore and expand upon the findings of this research. Additionally, comparative analyses between AI-driven feedback and traditional teaching methods would be valuable in identifying the most effective integration strategies for educational settings. Future studies should also investigate the potential of Chat-GPT in enhancing critical thinking and creativity in writing while examining its effectiveness across different linguistic and cultural contexts, which would provide a broader understanding of its global applicability.

Based on the study’s findings, it is crucial to recommend the responsible integration of AI tools like Chat-GPT into educational curricula. This integration should

support self-directed learning and promote linguistic development while considering ethical implications. Educators should be provided with comprehensive guidelines on effectively balancing AI feedback with traditional teaching methods. Additionally, there should be efforts to implement adaptive learning features in Chat-GPT to accommodate individual student needs. Expanding multilingual support is necessary to enhance accessibility for students from diverse linguistic backgrounds. Finally, robust data security and privacy measures must be established to address ethical concerns in AI-enhanced learning environments.

Conflict of interest

The authors declare no conflict of interest in relation to this research article.

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Interdisciplinary Themes of Sociolinguistic Studies - Language Learning, Technology, and Identity in the Age of AI and Globalization offers a compelling exploration of the dynamic interplay between language, society, and technology in today's rapidly evolving world. This edited volume brings together cutting-edge research on critical topics such as language learning and teaching challenges, the role of artificial intelligence in education, and the sociocultural dimensions of language identity and perception. By examining these themes through interdisciplinary lenses, the book provides valuable insights into how language shapes and is shaped by globalization, digital transformation, and post-pandemic realities. With a focus on diverse contexts—from multilingual classrooms to virtual communities and regional language preservation—this volume highlights the transformative potential of technology, including AI tools like ChatGPT, in fostering language growth and innovation. Ideal for researchers, educators, and students, this book serves as a comprehensive resource for understanding the complexities of language in contemporary society, offering fresh perspectives and practical implications for the future of sociolinguistic studies.

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