Text Redundancy in Academic Writing: A Systematic Scoping Review

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ABSTRACT

Background: The aim of academic writing is to effectively communicate and disseminate new knowledge and discoveries through the clear and concise expression of scientific ideas, highlighting the importance of being both brief and thorough in academic writing. The quality of this type of writing is under question. There are various sources that degrade the clarity and quality of writing. One of these aspects is redundancy, there are studies examining redundancy in written texts, however, redundancy in academic writing has received little attention. So far, there is no common understanding of the problem in academic writing, nor a common classification, nor a clear description of the causes of this phenomenon and its effects on the quality of academic texts.

Purpose: To map the existing literature on text redundancy, exploring its definitions and types, investigate the factors contributing to redundancy in academic writing, Furthermore, the article seeks to assess the impact of text redundancy on the clarity, coherence, and overall quality of academic communication.

Method: The Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines and the "PCC" mnemonic (Population, Context, Concept) were applied for inclusion and exclusion criteria were utilized. A literature search was carried out in June 2024. Employing a detailed search strategy, the review engaged two electronic databases – Scopus and Google Scholar, initially identifying 252 studies.

Results: 65 English-language studies addressing the text redundancy were included in the review. The synthesis of the selected research revealed that redundancy is perceived differently: as a phenomenon that reduces the quality and comprehension of the text; and a strategy that makes the text understandable and explicit. Different classification of redundancy were presented: by mode of redundancy expression and repetition, by nature, and by its role and impact. The functions and impact on academic written communication redundancy were reviewed.

Conclusion: This review explores the dual nature of text redundancy in communication, particularly within academic writing. It highlights that redundancy can enhance comprehension by reinforcing key ideas or hinder communication through excessive repetition. The study classifies redundancy into three categories: functional (beneficial), wordiness (excessive), and contextual redundancy, providing a framework for writers to manage redundancy effectively. The article emphasises the importance of balancing necessary repetition with conciseness to maintain clarity and reader engagement, as excessive redundancy may lead to reader fatigue.

INTRODUCTION

Conciseness is widely recognized as an essential characteristic of academic writing, as it enhances readability and ensures efficient communication of information (Lynn, 2016). By allowing readers to engage with critical content more easily, concise writing can increase the reach and influence of academic work

(Lynn, 2016). Alongside objectivity, formality, and clarity, conciseness forms one of the foundational pillars of effective academic writing (Chauhan, 2022). It maintains reader engagement and promotes a clear conveyance of meaning (Mu & Lim, 2022). The more explicit and straightforward the language, the easier it becomes to read and understand (Schlesinger, 1966; Baten, 1981). According to Shannon (1948), the predictability of a word within a given context affects how much information it carries; a highly predictable word contributes less new information, rendering it redundant. Therefore, it is the responsibility of the writer to craft a text that is as clear and comprehensible as possible for its intended audience (Demir, 2019; Soltani & Kuhi, 2022). Failure to do so can lead to the perception that the writer lacks expertise or confidence (Every, 2017). Effective writing requires authors to learn how to be precise and economical in their language, using only as many words as needed to convey their ideas (Abdollahi-Guilani et al., 2012; Prasetyo, 2015; Cao & Zhuge, 2022).

Writers must also anticipate the points at which readers may need additional guidance to fully comprehend the text and should incorporate supportive signals throughout (Kuhi, 2017; Dhivya & Koperundevi, 2024). This emphasis on reader comprehension aligns with the core aim of academic writing, which is to communicate knowledge to as wide an audience as possible (Demir, 2019). In this context, understanding the role and implications of redundancy in academic writing becomes critical.

The concept of redundancy in communication goes beyond simple textual repetition; it also encompasses multimodal and visual elements. However, redundancy at the textual level is often underexplored, leading to uninformative writing and ineffective communication. Existing research indicates that redundancy levels in academic writing can be significant, with studies reporting estimates of 50-75% redundancy in printed English texts (Newman & Waugh, 1960; Tuinman & Gray, 1972; Guerrero, 2009; Bazzanella, 2011; Yang, 2021). Understanding this issue is crucial for both authors and readers, as the presence of redundancy can markedly affect the efficiency and impact of communication (Bensoussan, 1990; Dhivya & Koperundevi, 2024). While all languages inherently contain redundancy, which can support successful communication, particularly in natural and imperfect conditions (Trudgill, 2009), its degree can vary based on the type and intent of the message (Marinashvili, 2020).

Recognizing text redundancy requires identifying and removing excessive information to improve the accuracy and efficiency of communication (Thadani & McKeown, 2008; Alontseva & Ermoshin, 2019; Rahman & Borah, 2021). This recognition process operates on both macro and micro levels. At the micro level, readers decode individual words and sentences, while at the macro level, they draw on pri-

or knowledge to derive overall meaning from the text (De Beaugrande, 1980; Lotfipour & Sarhady, 2000). Texts that are easier to read may either be more effective in their micro-level cues or present challenges when redundancy at the macro level is unrecognized (Schlesinger, 1977; Bensoussan, 1990).

Despite the emphasis on clarity and conciseness in academic writing, text redundancy remains a significant and often overlooked barrier to effective communication. This challenge is exacerbated by the lack of a comprehensive review addressing how redundancy manifests in academic writing, leading to inconsistent understandings, terminologies, and classifications (Horning, 1979; Lotfipour, 1982; Xue & Hwa, 2014; Yang, 2021; Leufkens, 2023). Such inconsistencies make it difficult for writers to eliminate redundancy effectively and for readers to engage with academic texts.

This scoping review aims to address these gaps by providing a detailed analysis of text redundancy in academic writing, its characteristics, causes, and effects on the quality of communication..

Research questions

RQ#1: To study thoroughly the term "redundancy", how researchers approach the description of this phenomenon, and identify the key characteristics of it.

RQ#2: To find in the identified sources and analyse the reasons, functions and classifications of text redundancy in academic writing.

RQ#3: To identify the impact of redundancy on academic text, its informativeness, clarity and coherence.

RQ#4: To suggest a structuralsed course on redundancy reduction in academic writing for doctoral students.

METHOD

Transparency Statement

To address our research question, we conducted a scoping review to outline the current literature. This review sought to define the extent of research done, recognize new evidence, and identify gaps in study, thus adding to the discussion in research and educational policy. We followed the PRISMA-ScR protocol. Before starting the research, a set of guidelines was established. The authors ensure that this manuscript presents an accurate, thorough, and comprehensive report of the conducted research; it addresses all important aspects of the study; and any deviations from the initial plan are properly acknowledged and justified.

Eligibility Criteria

This review was executed through a structured process that included: (1) formulating the research question; (2) identifying relevant literature; (3) selecting appropriate studies for inclusion; (4) extracting the key data from these studies; and (5) summarising and presenting the findings. The selection criteria for the literature were divided into three categories, based on the suggested mnemonic (Population, Concept, and Context) for framing research questions in scoping reviews, with an additional focus on the language, time period, geographical affiliation and type of publication (see Table 1). The research materials encompassed a range of document types, including original papers, book chapters, conference materials, editorials, unpublished doctoral and PhD dissertations, all discussing the concept of text redundancy.

Information Sources and Search Strategy

The literature search was carried out in two databases: Scopus and Google Scholar. Figure 1 illustrates the adherence to the PRISMA-ScR Protocol. First, a preliminary search was conducted in Google Scholar to identify studies relevant to the topic of interest. This search facilitated the identification of key terms and index terms closely related to the topic, focusing on aspects such as the definition of text redundancy, its characteristics, types, causes and consequences for both authors and readers. Using these terms, a comprehensive search strategy was developed and carried out on June 12, 2024.

The search terms obtained and refined by consulting relevant publications connected with the topic of interest of this study were combined using Boolean operators (OR and AND) and truncation symbols. In both Scopus and Google Scholar, the search entries were the following: "text redundancy", "academic OR scientific AND text redundancy", "academic writing AND redundancy".

For Google Scholar, only the first 50 results from each query were reviewed, based on the observation that the subsequent entries are increasingly less relevant and consistent with the focus of the review. 102 studies were found in the Scopus database. Additionally, the reference lists of selected studies were examined to uncover further pertinent research. From this search, 252 studies were retrieved (as shown in Figure 1).

Selection of Sources of Evidence

The sourced references' titles were organized in a Zotero library, and duplicate entries were eliminated using a reference management tool. The library, which includes all relevant titles, was systematically examined by two reviewers in separate phases: (1) screening based on title and abstract, (2) evaluation of the full text. Consensus meetings were conducted at each phase to discuss studies that met the inclusion criteria. Any disagreements among reviewers were addressed through consultation with a third reviewer.

Through the initial screening of titles and abstracts, 101 studies were excluded based on the predefined criteria. The review of the remaining 151 studies led to the removal of those unavailable or duplicated and exclusion of 80 studies that did not meet the inclusion criteria, leaving 55 studies for incorporation into the survey. An additional 10 sources were identified during the reference list screening process. Finally, 65 sources were included in the scoping review (see Appendix 1).

Data Charting Process

Data extraction was conducted by two independent reviewers, making the process more objective and ensuring that nothing of substance was overlooked. The complete data set extracted by one reviewer was then cross-checked by the other to ensure accuracy and consistency. Any differences between reviewers were addressed and resolved through consensus meetings. To systematically organise the extracted data, a standardised Excel spreadsheet was created. This spreadsheet captured a range of data points critical for our analysis, including: the name of the institution involved in the study; geographical coverage of the document; publication year of the document; objectives and a brief description of the document; the target population addressed by the study; definitions of text redundancy; characteristics of text redundancy; types of text redundancy; factors influencing text redundancy; consequences of text redundancy for both authors and readers; tools and strategies for reducing text redundancy. This structured approach facilitated a comprehensive and systematic review of the literature, enabling the authors to identify and synthesise key findings related to text redundancy in academic writing.

Summarising and Reporting the Results

Following the data charting phase, the same reviewers synthesised information concerning each aspect of the text redundancy phenomenon identified during the charting stage. The terminological ambiguity encountered during the source selection phase necessitated a detailed analysis of the identified definitions of text redundancy to extract their core characteristics. These characteristics were essential for establishing a consensus definition of text redundancy. The identified definitions of term "text redundancy" were organised in sequentially numbered Microsoft Word documents. The coding process, conducted by the first and second authors, followed the methodology proposed by Braun and Clarke (2006). Initially, the first author examined the text to generate a preliminary set of codes. These initial codes were then reviewed and refined in collaboration, leading to the development of potential themes. Subsequently,

Table 1

Eligibility Criteria

Criterion	Inclusion	Exclusion	Justification
Population	All the studies describing text redundancy in academic context, such research may involve university teachers, students, research staff, university administration and educational programmes (compulsory and elective).	All the studies outside the defined field.	This scoping review focuses on text redundancy and all participants in academic writing and text comprehending.
Concept	The concept of redundancy in the current review includes the study of redundant information in different forms (texts, educational programmes, university administration / organisation activities) and its impact on the effectiveness of academic communication.	Studies which do not relate to the concept of text redundancy.	The research on duplication of information in various forms and its impact on cognitive load, comprehension and quality of interaction in educational and research environments.
Context	The context of this review is higher education and research activities in higher education institutions. The studies cover the discourse in different countries and consider aspects such as academic writing, courses on its development, its representation in academic texts of different genres.	Studies outside writing context.	The focus of the research is text redundancy in academic writing. Anything beyond that would be unmanageable with the resources available for verification.
Language	English	Any other languages	English is the international language of scientific communication.
Time period	1948-2024	None	The aim is to get all the information of the 20th and 21st centuries. There is little information available about text redundancy, and even less that can be classified as academic writing.
Types of sources	Any types	Unavailable sources	Gathering all the sources possible
Geographical affiliation	Any location	None	Getting international perspective

each researcher independently performed a thematic analysis using these codes, a step critical for ensuring a thorough and impartial evaluation of the data.

Discussions between the coders achieved over 91% consensus on the themes, codes, and references, indicating a high degree of inter-coder reliability. Any differences were addressed through detailed comparison and dialogue, which led to the modification of some codes and the reclassification of certain themes. A second round of coding was conducted based on these adjusted themes, further refining the analysis. Similarly, the factors leading to and the implications arising from the excessive incorporation of superfluous words in scholarly texts, as identified by the researchers of the studies encompassed in this review, were systematically coded and conceptualised.

Data Visualisation

The metadata of the articles included in the review were processed using VOSviewer, a software tool for constructing and visualising bibliometric networks, was utilized to process the metadata of the articles in the review. This software makes it easier to visualize connections between the sources being analyzed and helps to find clusters in the research. With VOSviewer, it is possible to visually identify the primary research directions, displaying the connections between topics and indicating which areas have received more attention.

Using the VOSviewer software we defined the co-occurrence of keywords related to the topic of «redundancy»(see Figure 2). The nodes represent different keywords, and the edges depict the number of times they appear together in the same document. The thicker the edge, the more often the keywords appear together. Even though in the review

Figure 1

PRISMA-ScR Protocol
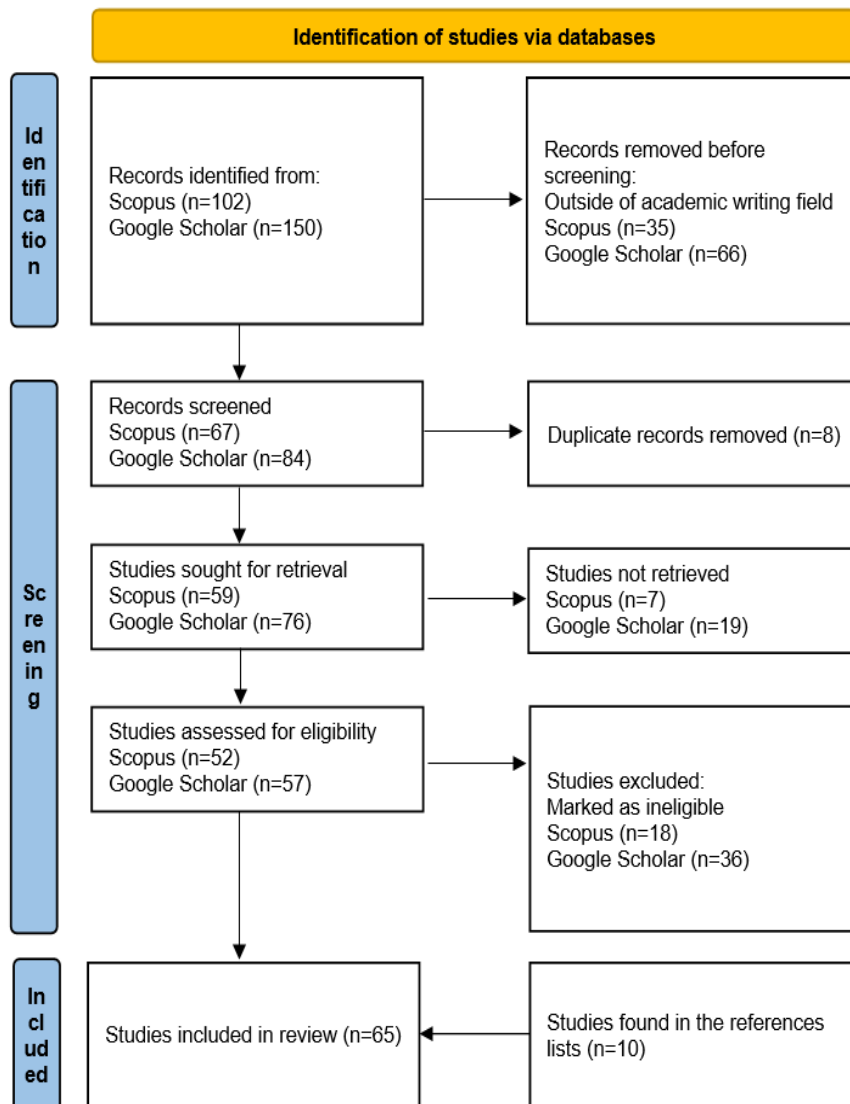
we included the studies only focused on text redundancy, the keywords reveal that other types of redundancy are also common, as shown by the clusters we identified. The keywords are divided into four groups marked by different colours: (1) Concepts directly related to redundancy, such as "cognitive load theory" and "multimedia learning" (green); (2) Keywords related to experimental design or research methodology, such as "accommodation" and "experimental pragmatics" (blue); (3) Keywords related to reading comprehension and attention, such as "split attention", "visual display", and "spatial contiguity" (yellow); (4) Keywords related to text processing and communication, such as "genre", "source text", "ellipsis", and "strategies" (red). It suggests that redundancy is a complex concept that is related to a variety of topics.

Figure 3 displays the research trends on redundancy throughout the years. The nodes correspond to various ideas linked to redundancy, while the edges indicate how many publications mention both concepts. The edge's color reflects the publication year, with blue indicating topics being in a research scope longer and yellow indicating more recent research trends. It indicates that the research focus on redundancy has been changing over the years. The studies examining how redundancy impacts reading and visual presentation have been studied much longer, and the studies concentrating on how redundancy is involved in multimedia learning and cognitive load theory has appeared recently.
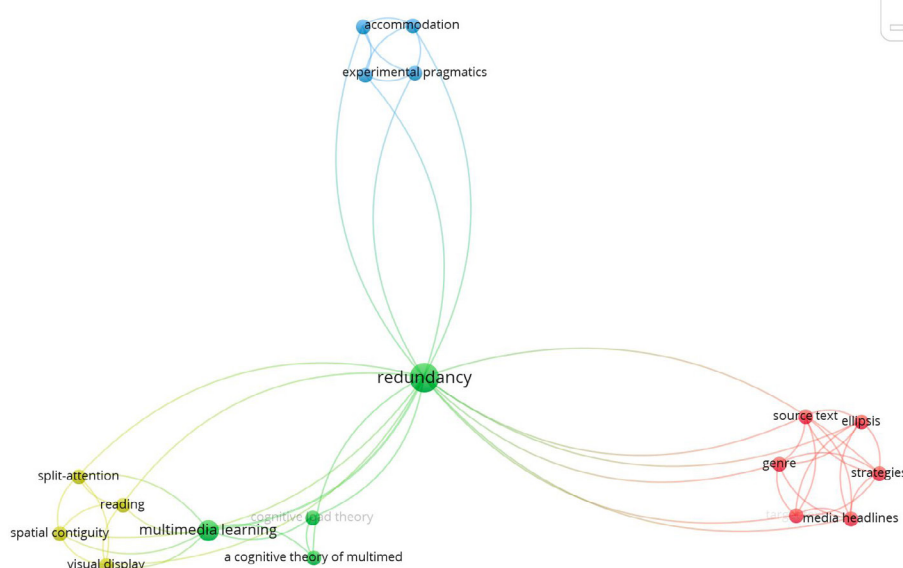
Figure 4 shows a word cloud that visualizes the most frequently discussed concepts in a body of research related to redundancy. The size of each word indicates how frequently that concept was mentioned in the identified sources. The largest cluster of words is centered around the key concept in this research. The other clusters of words suggest that redundancy is often discussed in relation to text processing ("source text ellipsis", "genre", "strategies", and "media headlines"), cognitive load ("cognitive load theory", "multimedia learning", "split-attention", "reading", "spatial contiguity", "visual display", and "a cognitive theory of multimedia") and pragmatic ("accommodation" and "experimental pragmatics"). No cluster has been formed specifically for text redundancy, and only one of the main clusters presented by the VOSviewer programme is close to text redundancy, indicating that it has not been studied enough.

An Overview of the Selected Articles

We analised demographic characteristics of the sources chosen for the review. Figure 5 displays a visualised net of the year-wise and Figure 6 summarises country-wise distribution of the included sources. Among the included sources, 27 studies were published in the 20th century, starting from 1948, and 38 studies were released during the last 24 years. In the middle of the 20th century there was little interest in the subject. The interest in the topic of redundancy began to grow in the 1970s. The interest increased significantly in the 21st century, particularly in the 2010s, when 16 studies were published, nearly a quarter of all papers found. This suggests that the academic community has been focusing on redundancy and how it affects scientific communication for the last few decades.

The topic received contributions from a combined 23 countries (see Figure 5). Approximately one-third of the research papers (n=23) were released in the USA. 9 countries exhibited comparable and relatively low engagement in the text redundancy with 2-7 studies. The other countries, such as Bahrain, Belgium, Colombia, France, Hungary, Indonesia, Iran, Poland, The Netherlands, Turkey, Ukraine and Uzbekistan, all had an equal contribution (1 study each), indicating a very minimal interest in the issue of redundancy.

RESULTS

Definitions of "Text Redundancy"

Identified Definitions

First, we want to address the problem of terminology. There are different interpretations of the term "redundancy" by scholars, and there is no unanimous understanding of the term in the research. The analysed sources identified that redundancy can be observed from two perspectives. Two concepts of this term are frequently mentioned by researchers with the opposite connotations: (1) excessive redundancy (see Table 2); and (2) beneficial redundancy (see Table 3).

After a thorough analysis of the definitions of excessive redundancy, we can define that it is the unnecessary repetition of information beyond what is needed for clarity, often involving extra words or repeated expressions. Excessive redundancy can make communication awkward and inefficient and be identified when removing certain words or phrases doesn't change the sentence's meaning. While beneficial redundancy (see Table 3) ensures information is still

Figure 2
Co-Occurrence of Keywords and Clusters

Figure 3

Research Trend on Redundancy Over Time
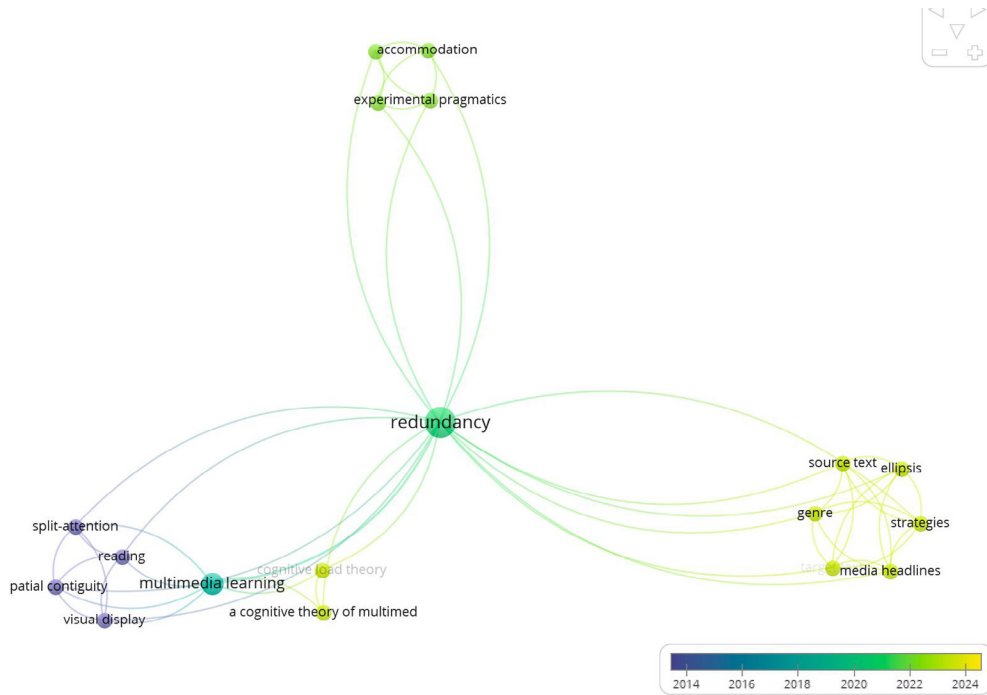
Figure 4

Density of Text Redundancy Concepts
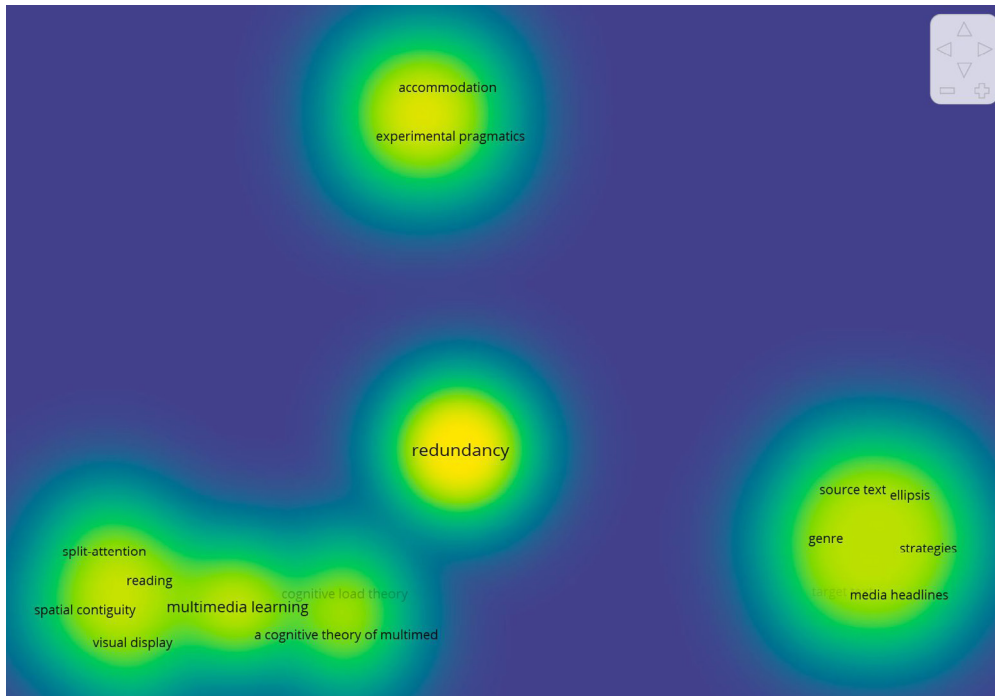
Figure 5

Publication Years of the Included Studies
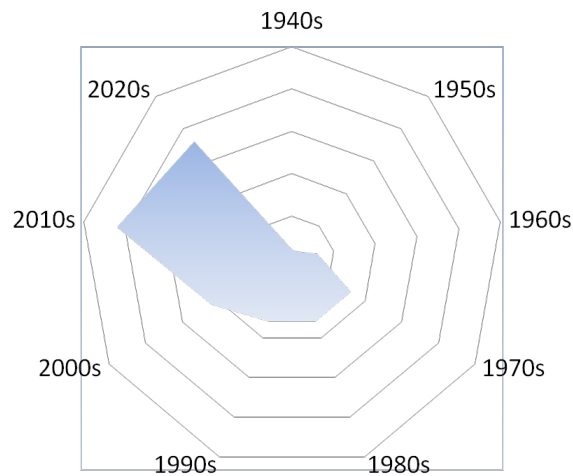
Figure 6

Geographic Affiliation of the Authors
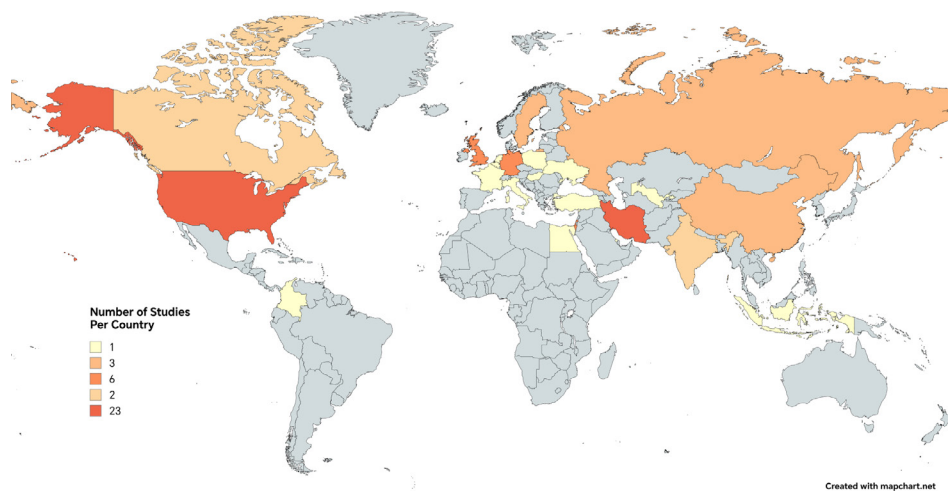
conveyed if parts are lost. It repeats concepts through various channels to ensure message clarity and reliability. This redundancy compensates for reader inattention, enhances text predictability, and facilitates information processing. By providing more information than minimally necessary, redundancy ensures effective communication and strengthens the connection between readers and writers.

Redundancy Characteristics

Beneficial redundancy ensures information is conveyed even if parts are lost, but excessive redundancy can make text awkward and impede efficient knowledge transfer. It is often identified when removing certain words or phrases still results in a sentence that conveys the same meaning. We identified the characteristics that collectively illustrate how excessive redundancy complicates communication,

detracts from clarity, and may hinder effective information transmission (see Table 4).

When information is duplicated across multiple sources or cue systems, it leads to unnecessary overlap that complicates rather than clarifies communication. Excessive redundancy poses significant challenges that can undermine effective information exchange, while beneficial redundancy can play a crucial role in reinforcing communication and enhancing clarity. The characteristics that highlight the multifaceted role of redundancy in enhancing communication effectiveness and ensuring message clarity are presented in Table 5.

Beneficial redundancy is essential for enhancing communication, as it reinforces key messages through repetition.

Table 2

Definition of Excessive Redundancy

Source	Definition
Shannon, 1948, 1951	"mutual information"; "the difference between the entropy of the messages actually transmitted and the maximum entropy that the channel could transmit"
Klare, 1963	"the extent to which a given unit of language is determined by nearby units"
McGarry, 1975	"the complement of entropy (uncertainty), i.e. as entropy rises, redundancy decreases, and vice versa"
Horning, 1979	"redundancy exists whenever information is duplicated by more than one source, and in the case of reading, information is duplicated by at least four sources or cue systems"
Darian, 1979	"information whose meaning may be predicted or limited by other information in the discourse"
Hunnicutt, 1985	"the information in a complete sentence over and above that which is essential"
Smith,1971	"there is redundancy whenever the same alternatives can be eliminated in more than one way"; "whenever information is duplicated by more than one source"
Smith, 1978	"the reader's prior knowledge … the reader could not perceive the redundancy in a written text unless it reflected knowledge already present in the reader's mind"
Rosie, 1973	"anything other than the minimum required to represent or transmit information is considered redundant"
Forlini et al., 1982	"the unnecessary repetition of an idea"
Dawson, 1992	"the use of more words than are necessary to express a thought, especially the use of two expressions that mean the same thing"
Grant-Davie, 1995	"a kind of linguistic cholesterol, clogging the arteries of our prose and impeding the efficient circulation of knowledge"
Lehmann, 2005	"a message is redundant if it contains such elements which contribute nothing to the information not already conveyed by the rest of the message"; "repeating an utterance"
Every, 2017	"the excessive use of unnecessary words"; "the repetition of the same idea in different words, or tautology (in a narrower sense)"
Wolf et al., 2023	"an information-theoretic measure that quantifies the amount of information obtained about one random variable (e.g., prosody) by observing the other random variable (e.g., text)"
Lotfipour & Sarhadi, 2000	"a feature is redundant if its presence is apparently unnecessary"; "a piece of information is redundant if it is reiterated (in any mode) in relation to features or pieces of information occurring before it in the text"
Bazzanella, 2011	"redundancy measures how much the information transmitted from the source differs from the maximum possible information, given the same set of symbols"
Trudgill, 2011	"multiple expressions of a single meaning within the same phrase or clause"
Xue & Hwa, 2014	"some extraneous word or phrase that do not add to the meaning of the sentence but possibly make the sentence more awkward to read"; "consider a word or a phrase to be redundant if deleting it results in a fluent English sentence that conveys the same meaning as before"
Heltai, 2018	"the expression of the same information or meaning component more than once, or the overt expression of a piece of information or a meaning component that is considered self-evident and best left implicit, to be inferred from other linguistic items in the given piece of discourse or from the situation and/or general world knowledge"
Alontseva & Ermoshin, 2019	"how much the length of a text in a given language can be reduced without losing any part of the information"
Rasulov & Artikov, 2023	"the expression of simple content in compound sentences"; " a language unit that does not have any semantic load in the text, that is, does not perform any task"

Source	Definition
Marinashvili, 2020	"the excessive information (in other words repeated or unnecessary information), defined as percentage content of excessive information in the texts of a given language";
	"information may be discarded from the text without the harm to its meaning and easily restored as it is determined by the structure of the language itself"
Yang, 2021	"the part of the information that is more than the minimum required is redundant"
Kravtchenko & Demberg, 2022	"more information is provided than needed to recover the intended meaning or world state"
Dhivya & Koperundevi, 2024	"the unnecessary repetition of words or elements within a sentence that do not contribute substantially to its meaning"

Table 3

Definition of Beneficial Redundancy

Source	Definition
Darian, 1979	"a method of reinforcing communication, by repetition of concepts through linguistic or nonlinguistic channels"
Zola, 1981	"a measure of certainty"
Lotfipour, 1982	"redundancy as a textual strategy functions in two ways: compensating for the attention failure of the reader and neutralizing the linearity of the text"
Horning, 1991	"the characteristic of written language that helps ensure that the reader gets the message, so it is another means by which readers and writers can connect in text"
Lehmann, 2005	"additional explanation in demanding communicative conditions, or a poetic function"
Bazzanella, 2011	"the repetition of relevant information"
Marinashvili, 2020	"one of the factors increasing the reliability of received information"
Yang, 2021	"excessive information provided in information transmission beyond a minimum amount to ensure the effectiveness of communication"
Leufkens, 2023	"the expression of a single meaning by means of both a lexical and a grammatical element";
	"facilitates processing and acquisition, as it increases the predictability and robustness of the sentence"

This redundancy increases the reliability of the information conveyed, fostering trust and clarity in the exchange. However, it is crucial to strike a balance between beneficial redundancy and excessive redundancy to maintain effective communication. By doing so, we can ensure that messages remain clear, concise, and meaningful.

Classifications of Redundancy

We have not been able to capture a unified perception regarding the types of redundancy. In this review we observe different approaches to classifying text redundancy in a language in general which can be applied to academic writing as well. We identified redundancy classifications based on different methods which can be divided into three groups: (1) by mode of redundancy expression and repetition; (2) by nature; (3) by its role and impact. To the first category we can assign the following: Yang (2021) classifies redundancy by parts of speech (see Table 6); Grant-Davie (1995) differentiates this phenomenon by redundant phrases it appears

in (see Table 7); Lehmann (2005) divides it into four types by repetition types (see Table 8).

Grant-Davie (1995) classified redundancy into 5 types of redundant phrases it appears in: redundant pairs, redundant modifiers, redundant categories, phrases used where words would do, and empty sentence openings.

Lehmann (2005) identified 4 types of redundancy: pleonasms, tautology, repetition and hypercharacterization.

The second category of redundancy classification is based on the nature principle. Some agreement has been achieved among researchers (Wit & Gillette, 1999; Xu, 1984; Rasulov & Artikov, 2023), classifying it into linguistic (grammatical) redundancy and non-linguistic (contextual) redundancy, researchers assume a dichotomy based on the causes for emergence whether the redundancy is generated from grammatical rules or the contextual need (see Table 9). Grammatical redundancy is internal to the language system, is systematic and obligatory, whereas contextual redundan-

Table 4

Characteristics of Excessive Redundancy

Characteristic	Meaning
Multiple Sources of Information	Excessive redundancy occurs when information is duplicated across multiple sources or cue systems, resulting in unnecessary overlap (Horning, 1979; Smith, 1971).
Predictable and Non-contributory Information	Redundant information may be predictable or limited by surrounding discourse, indicating a lack of new value. It includes elements that exceed what is essential for conveying meaning, complicating communication (Rosie, 1973; Darian, 1979; Hunnicutt, 1985; Lehmann, 2005).
Unnecessary Repetition	Excessive redundancy involves the unnecessary repetition of ideas, phrases, or words that do not enhance overall meaning, including tautological expressions (Forlini et al., 1982; Dawson, 1992; Grant-Davie, 1995; Xue & Hwa, 2014; Every, 2017).
Length Reduction	The extent of redundancy can be quantified by how much a text's length can be reduced without losing essential information, indicating excessive information (Alontseva & Ermoshin, 2019; Marinashvili, 2020).
Semantic Load	Redundant language units lack semantic weight and do not contribute meaningfully to the text, sometimes providing more information than needed to recover the intended meaning (Rasulov & Artikov, 2023; Kravtchenko & Demberg, 2022).

Table 5

Characteristics of Beneficial Redundancy

Characteristic	Meaning
Reinforcement of Communication	Redundancy serves as a method to reinforce communication by repeating concepts, which can occur through both linguistic and nonlinguistic channels (Darian, 1979; Lehmann, 2005).
Measure of Certainty	It acts as a measure of certainty, helping to ensure that the intended message is conveyed clearly (Zola, 1981; Horning, 1991; Bazzanella, 2011).
Compensation for Attention Failures	Redundancy functions as a textual strategy that compensates for potential attention failures of the reader, helping to maintain comprehension (Lotfipour, 1982).
Increased Reliability of Information	It contributes to the reliability of the information received, making it more trustworthy and clear (Marinashvili, 2020; Yang, 2021).
Facilitation of Processing and Acquisition	Redundancy facilitates the processing and acquisition of information by increasing predictability and robustness in sentences (Leufkens, 2023).

cy is voluntary. Contextual redundancy involves the judgment of the speaker concerning the receptor's background or it may simply be used to achieve a certain rhetorical effect (Wit & Gillette, 1999).

One more redundancy classification based on nature is represented by the study of Albers et al. (2023) who divided redundancy into content redundancy and modal redundancy (see Table 10).

In the third type of redundancy classifications Lotfipour & Sarhady (2000) distinguish text redundancy based on their role in the text and their impact on understanding and perception of information (see Table 11).

Text redundancy classifications encompass the various methods by which information can be repeated or reinforced within a text. By understanding these classifications, writers can analyze language use more effectively, allowing them to identify instances of unnecessary repetition or, conversely, purposeful reinforcement. This awareness not only aids in improving the clarity of the text but also enhances overall communication effectiveness, ensuring that information is conveyed in a manner that is both engaging and easily comprehensible for the reader.

Sources of Redundancy

Redundancy in texts and communication is a multi-level phenomenon that can manifest at various levels of language and under different circumstances. Researchers identify several key sources of redundancy that are important to consider when analyzing written and spoken texts. First, there is visual information, which refers to the text itself as it appears on the page. Redundancy at this level can manifest through the overuse of headings, subheadings, or repeated formatting elements that do not add meaning but may confuse the reader or complicate the perception of the

Table 6

Redundancy Classification Based on Parts of Speech It Appears in

Type	Example
Noun Redundancy	"I should like to apply for *a secretary job*."
Pronoun Redundancy	"Students have to pay *their* tuition fees *themselves*."
Verb Redundancy	"There are other interesting and special means of transportation *remained* in China."
Adjective Redundancy	"There are *all kinds of different* Zongzi all over the country."
Adverb Redundancy	"A lot of people *compete together* for one job, of course some of them will lose."
Adverb Redundancy	"In China, our situation is *relatively better.*"
Coordinating Conjunction Redundancy	"She worked hard *yet* without complaining."
Subordinating Conjunction Redundancy	"Most of the students *who* studying abroad did not want to come back."
Preposition Redundancy	"Some students will even quit the jobs they just find and *to* seek another."
Article Redundancy	"If you have courage of facing *the* all kinds of the difficulties, studying abroad is a good opportunity for you."
Auxiliary Verb Redundancy	"Many people *are* regret that they didn't get degrees when they were students."

Note. The table is based on the information from Yang (2021).

Table 7

Redundancy Classification by Redundant Phrases It Appears in

Type	Example
Redundant pairs	*"benefits and advantages"*
Redundant modifiers	*"mandatory requirement"*
Redundant categories	*"rectangular in shape"*
Phrases used where words would do	*"at this point in time» instead of «now"*
Empty sentence openings	*"There is a strong likelihood of rain tomorrow."*

Note. The table is based on the information from Grant-Davie (1995).

information (Smith, 1971; Bartell et al., 2006; McCrudden et al., 2013).

Second, orthographic information pertains to how readers rely on their knowledge of spelling and letter sequences to predict the next elements of a text. For example, in languages with regular orthographic rules, such as English, knowledge of typical letter combinations helps to anticipate words, which can create predictability and, thus, redundancy (Smith, 1971; Chetail, 2015; Staub, 2015). Syntactic information is related to how sentence structure creates redundancy. Grammatical rules allow us to predict the next element in a sentence, especially in languages with a fixed word order. This can lead to the repetition of information at the syntactic level when the word or phrase structure does not add

new information but merely confirms already known data (Smith, 1971, Wit & Gillette, 1999; Berdicevskis, 2015).

At the semantic level, redundancy occurs when the context provides sufficient cues for the readers to easily predict the meanings of words or phrases, rendering additional explanation superfluous. This phenomenon is particularly prevalent in academic texts, where authors might feel compelled to elaborate on concepts that are already clear from the surrounding context. For instance, unnecessary elaboration can take the form of reiterating obvious points that the target audience is likely to understand without further clarification. Additionally, the use of synonyms in place of a single, precise term can create a sense of redundancy that detracts from the overall clarity of the writing. Such practices not

Table 8

Redundancy Classification by Repetition Types

Type	Explanation	Example
Pleonasms	In general, a pleonastic expression contains constituents – typically two – one of which implies – technically: entails – the other. Thus, the meaning of the latter constituent is part of the meaning of the former; the meaning of one constituent entails the meaning of the other without being identical to it.	*"return back"*
Tautology	It refers to a proposition that is always true independently of the truth values of its constituents.	*"each and every", "necessary and unnecessary", "null and void", "enough is enough", "business is business", "It will rain or it will not rain."*
Repetition	The synonymous elements are identical.	*"This is totally impossible - totally impossible."*
Hypercharacterization (reinforcement)	The focal component is expressed by an inflectional or derivational morpheme.	*"more easier"*

Note. The table is based on the information from Lehmann (2005).

only dilute the impact of the message but also contribute to a more cumbersome reading experience, potentially frustrating readers who seek concise and direct communication (Smith, 1971; Bodenreider, 2003). Moreover, excessive semantic redundancy can hinder the flow of arguments, making it challenging for readers to follow the author's line of reasoning. In academic writing, where precision and clarity are paramount, recognizing and minimizing semantic redundancy is essential for effective communication and ensuring that the core ideas are conveyed with maximum impact.

Redundancy also exists at the phonetic and morphological levels. For example, the addition of affixes that convey the same information already present in the root of a word can create unnecessary repetition of meaning. Additionally, certain morphological constructions may include multiple affixes that, while grammatically correct, do not contribute new information and can clutter the communication (Stanley, 1967; Darian, 1979; Caballero, 2014).

At the discourse level, redundancy can be observed through the repetition of the same thoughts or ideas in different parts of a text, which can significantly impact the overall coherence and effectiveness of the writing. This phenomenon is particularly common in classroom contexts, where students may reiterate points made earlier in their presentations or written assignments, often in an attempt to emphasize their arguments. Similarly, in academic articles, authors may inadvertently duplicate their thesis or central arguments without providing additional insights or perspectives. This redundancy not only reduces the overall effectiveness of the writing but can also make the text more challenging to process for readers, who may struggle to discern the key contributions of the work amidst the repetition. When authors reiterate the same points without adding depth or nuance,

they risk losing the attention of their audience and undermining the impact of their arguments (Darian, 1979; Lyster, 1998; Freywald, 2018). Moreover, excessive redundancy at the discourse level can create a sense of monotony, making it difficult for readers to maintain their focus and interest. In academic writing, where clarity and precision are essential, it is crucial for authors to be vigilant about avoiding unnecessary repetition.

Another important source of redundancy is stylistic errors, which can manifest in various forms, such as the excessive use of linking words or referential expressions. Linking words, or transition phrases, are essential for guiding readers through the flow of ideas within a text; however, when they are overused, they can create a convoluted narrative that hinders comprehension. Violations of the formal connection between sentences can exacerbate these issues, leading to a disjointed reading experience. In scientific texts, where precision and clarity are paramount, authors may inadvertently create gaps in logic or coherence by failing to establish clear relationships between their statements. This can occur when sentences are poorly structured or when the logical flow is disrupted by the inclusion of superfluous information. Such stylistic errors not only reduce the readability of the text but can also undermine the credibility of the authors, as readers may perceive them as less rigorous in their writing (Buscail & Saint-Dizier, 2009; Alontseva & Ermoshin, 2019).

Redundancy can also be closely related to content, particularly in the use of redundant modifiers or descriptions that do not contribute any new meaning but merely reiterate ideas that have already been expressed. For example, this can be seen in excessive explanations, where the meaning of the modifiers completely or partially overlaps with the meaning of the main word (Grant-Davie,1995; Lehmann, 2005; Yang,

Table 9

Redundancy Classification by Causes for Emergence

Type	Grammatical redundancy	Contextual redundancy
Definition	The internal systematicity and rule governed behavior of a language in which two or more of its features serve the same function. It is internal to the language in the sense that it is generated from grammatical rules and is independent of situational, contextual and nonlinguistic considerations; it is truly redundant since it serves only to repeat information already given by another feature.	This repetition consists of the reproduction of identical elements of information or of elements that are only apparently identical. Contextual redundancy is not systematically generated by grammatical rules, although nongrammatical circumstances may suggest or require its use. Such circumstances include sociolinguistic and psycholinguistic factors. Unlike grammatical redundancy there is not one kind of contextual redundancy and a subcategorization can be made on the basis of the structure of the redundant expression.
Categories	The English –s	Identical or synonymous repetition
1.	English requires the morpheme -s to mark third person singular verbs in the present tense. Since English is not a 'pro-drop' language, the presence of an expressed subject makes the -s morpheme redundant. That morpheme, nevertheless, is obligatory. According to the grammatical rules of English, the speaker may not use the -s in some contexts and omit it in others. The -s morpheme is semantically superfluous since it offers no more information than is already expressed by the subject of the sentence	This kind of redundancy occurs when the expression contains two (or more) identical or synonymous words or subexpressions. *"Last year I visited the Eiffel Tower, the tallest steel construction in the center of Paris."* From the examples it is clear that the redundant expressions often do carry a semantic goal.
2	Questions Most sentences have at least two features that indicate the interrogative nature of the expression. English clearly has a backup system for ensuring that certain utterances are understood as questions. Information questions: (1) (a) *"How is your mother?"* The interrogative markers in this sentence are: (1) Interrogative word: "how." (2) Subject-predicate inversion. (b) *"Where did you buy that car?"* In this example the interrogative markers are: (1) Interrogative word. (2) Introduction of the auxiliary, "did." (3) Subject-auxiliary inversion.	Isolating, salient repetition An isolating redundant expression contains at least two subexpressions, of which one implicitly contains one or more features or characteristics of the other. *"I love the salty sea."*
3	Spelling The rules of spelling function typically operate in written expressions by conforming to a pattern of expectation in the reader a uniform spelling increases the redundant coding of an expression and thereby increases the comprehensibility of the utterance or written text. *"evereewan shoot edher too the saim spellin"* = *"Everyone should adhere to the same spelling."*	Contrasting repetition Contrasting redundancy occurs when two (or more) words or expressions that semantically constitute a contrast are repeated or in some other way redundantly coded. *"Although his parents are Asian, his eyes are blue and not dark."*
4	Word order Although it may be harder to recognize word order as a form of redundancy, the word order of a sentence constitutes one of the most important linguistic coding systems besides the words and expressions themselves. *"Her book the he gives."* It does present the information (i.e., what is the subject, what is the indirect object, etc.) in a more accessible manner, simply by conforming to the expectations that the receptor has of a sentence	Distinguishing, differentiating repetition A form of repetition of information in a context of differentiating one object from another. Many words or expressions that are not ambiguous in one context, may be ambiguous in another. In order for contextual redundancy to occur it requires a context with possible alternatives besides the one being singled out in the expression. *"I am looking at the monkey in the group with the red boundary."*

Type	Grammatical redundancy	Contextual redundancy
5	Double negotiation Double negatives introduce a redundancy in the sentence that reduce the possibility of a mistake. *"I can't give you no money"*	
6	Concordance of adjectives and articles with noun in gender and number (does not apply to the English language)	
7	Indirect object pronoun redundancy (does not apply to the English language)	

Note. The table is based on the information from Wit & Gillette (1999).

Table 10

Redundancy Classification by Nature

Type	Explanation	Function
Content redundancy	Content redundancy occurs when the same information is presented more than once. This includes any situation in which multiple sources present the same information, irrespective of the combination of sources, such as animation and written text, animation and narration, or written text and narration	Content redundancy enhances learning and decreases cognitive load.
Modal redundancy	Modal redundancy occurs when multiple information is concurrently presented in the same mode (auditory or visual), resulting in an excessive load in either the auditory or the visual channel. Since modal redundancy does not presume a contentual overlap, it can occur in combination with content redundancy or on its own. As an example, modal redundancy occurs whenever animation or narration is accompanied by written text, irrespective of its content	Modal redundancy harms learning and increases cognitive load.

Note. The table is based on the information from Albers et al. (2023).

2021). When authors include redundant modifiers, they risk diluting the impact of their message, as readers may become bogged down by the repetition and lose sight of the core ideas being presented.

Finally, interference between languages can be a significant source of redundancy, particularly for second-language learners (L2). When individuals are acquiring a new language, they often rely heavily on their native language as a reference point. This reliance can lead to the practice of literal translations, where phrases or sentences are directly translated without considering the nuances and idiomatic expressions of the target language. Such an approach can result in awkward phrasing and redundancy, as learners may inadvertently replicate structures or expressions that are common in their native language but do not convey the same meaning or efficiency in the new language (Heltai, 2018; Yang, 2021; Al-Qaddoumi & Ageli, 2023).

Reasons for Text Redundancy

Redundancy in texts can arise from various functional needs and cognitive considerations, making it a crucial component of both written and spoken communication. Scholars have identified several key reasons for the presence of redundancy in texts, particularly in academic and technical writing. Redundancy plays an important role in compensating for readers' attention lapses and addressing the linear nature of text. Lotfipour-Saedi (1982) emphasizes that since human cognitive capacity is limited, readers may struggle to focus on all concepts in a text. As a result, writers often repeat key ideas in different ways. This repetition ensures that even if the reader misses some information, it can be recovered later in the text. By providing more information than strictly necessary, redundancy protects against comprehension failure and helps readers process complex or dense material more effectively.

Table 11

Redundancy Classification by Its Role and Impact

Type	Explanation	Example
Exact Repetition	Not confined to mere words, but they include exact repetition of groups, the same patterns, clauses, clause complexes (sentences). While exact repetition as a textual strategy in general and as one manifestation of redundancy in particular may not be tolerated in some texts, it can engrave some vital effects such as expressive and aesthetic aspects of communication, emphasis, rousing the interest of the addressees, and excitement on the receivers in some others.	"A muscle [*contracts*] extremely rapidly when it *contracts* against no load - to a state of full contraction in approximately 0.1 seconds for the average muscle" (Gayton, 1985).
Functors	Grammatical words without any meaning by themselves, those which replace the presupposed items in the context. This group of words occur with the highest frequency in all different texts and this can be related to the economy principle in language. The functors have the potentiality to replace a word, a group, a clause, a sentence, etc. Reiteration of the words without any modification may make a text boring and overredundant; hence, the use of function words can counteract this effect. The references cannot be effective beyond some limited spans in text; otherwise, they result in confusion and ambiguity, i.e., the more the distance between the presupposing and presupposed items, the more restrictions on the use of references.	Pronouns and demonstratives, bound morphemes (e.g., *"re-"*), and definite articles.
Semantic Redundancy		
Grammatically Undeletable Redundancy(GUR)	Reiteration is fulfilled by content words including synonyms, antonyms, general words, different parts of speech, comparisons, and different codes. One synonymous lexical item can refer back to another, to which it is related by having a common referent.	"For instance, they contain a large quantity of carbonic anhydrase, which [catalyzes] the reaction between carbon dioxide and water, *increasing* the rate of this reaction many thousand fold" (Gayton, 1985). "Before treating a patient for any disease, the physician must [find out] what the disease is. In other words, he must diagnose the disease"(Gayton, 1985).
Grammatically Deletable Redundancy (GDR)	The elaboration of a piece of information as distinct from what we have presented so far. It seems to be right in assuming that the elimination of the previous modes of redundancy is not permissible in terms of both grammar and meaning. Most of the realizations of GDR can be omitted without impairing the text grammatically.	
Grammatically Deletable Redundancy (GDR)		
Reiteration by paraphrase	Explaining the meaning of a word, a phrase, etc. by using other words in an attempt to make the meaning easier and more clear to understand. This is mostly realized in clause or sentence forms, and they appear immediately following the presupposed items whereas this is not the case for the latter.	The word "paraphrase" is so general that it can subsume some other semantic reiterations including exemplification, clarification, appositive, and relative clauses. These versions of paraphrase do not have the same value in terms of their overt/covert realizations.
a) Relative Clause Relative	Relative clauses are considered to be redundant due to their function in reiterating an item preceding them. These redundant elements are so crucial in unfolding the meaning of their presupposed items that their length sometimes trespasses the whole main clause of a sentence. Eliminating all the relative clauses of a text makes it writer-specific or restricts it to a particular group of readers, while the sole purpose of writing is to communicate the message in the best way possible. The relative clauses make sentences self-contained, i.e.. the reader does not have to search around the text to recover their meanings. The omission of the relative clauses, on the one hand, may make the text under-redundant for some readers, and presenting them in main clauses. On the other hand, it may make the text over-redundant.	

Type	Explanation	Example
b) Appositives	Appositive refers to words, phrases, or clauses in a sentence having the same reference.	*"especially", "particularly", "for example", "e.g.", "such as", "i.e.", "in other words", "that is", etc.*
		"[Infectious diseases which spread by contact or touch are called contagious diseases. *Malaria smallpox, diphteria, and colds are examples of infectious diseases* (Guyton, 1985)"
		"Thus far, all the acquired immunity that we have discussed has been [active immunity]. That is, the person's body develops either antibodies or sensitized lymphocytes in response to invasion of the body by a foreign antigen (Guyton, 1985)"
Reiteration by Intertextuality	Two kinds of intertextual relationships, i.e. relationships existing between elements of a given text (passive intertextuality), and relationships existing between distinct texts (active intertextuality). Intertextuality is taken as redundant due to the fact that it duplicates the preceding or following information: hence, its presence is apparently unnecessary despite the fact that the use of intertextuality is discoursally motivated.	
Reiteration by Cross-References	The devices by which one can keep track of references retrospectively or prospectively in the unfolding discourse. These redundant elements provide links between the discoursal themes and reiterate them in various ways so that they make the process of reading more possible.	*"in the following chapter";* *"as mentioned above"; "it will be discussed elsewhere"*
Redundancy and Predictor Signals	Predictor signals are enumerations and words that inform readers retrospectively and prospectively in a text. They serve as warnings of what the writer is about to produce, or what he has already produced.	*There are a few stages: (1)...(2)...(3)..., first,... second, ..., third,...*
Redundancy and Summary	In scientific texts, the more the reader comes to the end of the text, the more redundant elements are crystalized. It seems that the density of redundancy reaches its climax in the summary of a text because the writer without anything new only reviews the main points of the text. This part can be presented either covertly (without any marker signifying the summary) or overtly. The writer's awareness of readers' memory limitations helps him keep step with the readers, i.e., he does not hasten to overload readers with a lot of information in a short span. These condensed parts of texts have important cognitive effects on the reader's comprehension and recall, and they can act as feedback whether the reader has extracted the intended message or not.	*"in sum"; "to close up the text"; "I should now conclude by summarizing my arguments"*
Redundancy and Conjunctions	The lack of these tools (1) conjunctives, (2) conjunctive adverbs, (3) correlatives; (4) coordinators, (5) subordinators) does not seriously damage comprehension because readers are usually able to make bridging inferences.	(1) *"so that", "as long as",* etc.; (2) *"however", "therefore",* etc.; (3) *"either or", "both... and",* etc.; (4) *"but", "and, ...";* (5) *"because", "when",* etc.

Type	Explanation	Example
Redundant Collocations	It includes any pair of lexical items that stand to each other in some recognizable lexico-semantic (word meaning) relation. Accordingly, such pairs of words can be (1) synonyms, (2) antonyms, (3) series, (4) hyponyms, and (5) paranomy occuring freely both within a sentence or across sentence boundaries.	(1) *"climb and ascent"*; (2) *"like and hate"*; (3) *"north and east"*; (4) *"chair and table"*; (5) *"car and brakes"*. The water gain occurs only through the application of [water] *droplets* to the soil surrounds or directly to the plant; this may me through rainfall or other forms of participation, irrigation or flooding or dew formation (Criffitlis, 1975)

Note. The table is based on the information from Lotfipour-Saedi & Sarhady (2000).

In professional scientific and technical writing, redundancy often manifests as a strategy to increase efficiency by condensing information. Gengshen (1990) notes that experts frequently use abbreviated terms, contracted forms, or shorthand expressions to streamline communication. This approach assumes that the intended audience shares common background knowledge, enabling more concise communication. In this case, redundancy serves to optimize communication within a specialized group, allowing for focus on critical content while reducing the need for explanations that would be necessary for a less informed audience.

Another reason for redundancy is to enhance cohesion and clarity within the text. As Bazzanella (2011) points out, the repetition of certain words or structures can reinforce the logical connections between ideas, making the text more coherent. This is particularly important in complex academic writing, where clarity is critical for the reader's understanding of intricate arguments. Redundancy through repeated keywords or phrases can help maintain focus on core ideas and ensure that the reader is continuously reminded of the main thesis or key concepts.

Additionally, redundancy can also serve as a pedagogical tool. In educational contexts, especially in instructional materials, repetition of key points or ideas is a common method to reinforce learning. This is especially true for students who may be encountering complex ideas for the first time (Watkowska, 2021). By intentionally including redundancy, educators aim to facilitate deeper understanding and long-term retention of information (Darian, 1979).

Finally, redundancy may arise as a consequence of cultural and linguistic differences in communication styles. In some languages or cultural contexts, repetition is a valued rhetorical device that signals emphasis or politeness. For instance, in certain Asian languages, redundancy can be used to ensure clarity or avoid miscommunication, reflecting a different approach to information density compared to Western academic writing (Yang, 2021). In multilingual academic environments, this can lead to the transfer of redundant structures from one language to another, particularly among non-native speakers of English.

Redundancy Impact on Text Comprehension

Redundancy in a text occurs when it presents or invokes information that readers already possess, either because they knew it beforehand or because it was previously introduced in the text. According to Grant-Davie (1995) and Every (2017), this repetition can lead to inefficiency, as the reader is provided with cues that are not necessarily new. Smith (1971) highlights that this redundancy has two key effects: it offers repetitive cues to the reader and narrows the range of possible language elements that can occupy certain positions in the sentence. This process can aid in comprehension by guiding the reader's expectations about upcoming information but can also lead to reduced engagement with the material if overused (Lotfipour & Sarhady, 2000).

Redundancy can also negatively impact writing by diminishing the clarity, efficiency, and overall impact of ideas. Forlini et al. (1982), Grant-Davie (1995) and Marinashvili (2020) note that when ideas are repeated without purpose, they lose their sharpness, which weakens the text's ability to effectively convey its message. This is especially problematic in technical writing, where readers do not have immediate access to the writer for clarification. In such contexts, unnecessary redundancy can lead to misunderstandings that may have serious consequences.

Wang (2021) points out that unnecessary redundancy in writing does not contribute new information nor serve a rhetorical or literary purpose, which significantly affects the precision and readability of the content. When readers encounter repeated or irrelevant information, the flow of the text is disrupted, and comprehension is hindered, leading to frustration and a potential loss of interest in the material (Demir, 2019).

However, some degree of redundancy is essential for ensuring coherence and readability in a text. Horning (1993) and Leufkens (2023) argue that redundancy in the form of overlapping information or cohesive ties between sentences contributes to the coherence of a text. This adherence to the given-new contract, where new information is presented in the context of already familiar or «given» information, helps readers relate new concepts to their existing knowledge. Grant-Davie (1995) and Bazzanella (2011) state that the easier it is for readers to make connections between new and prior information, the better they can understand and retain that information. This overlap is crucial for readability, as it allows readers to form a continuous thread of understanding throughout the text.

Redundancy is also embedded in the structure of language itself. Smith (1978), Wit & Gillette (1999) and Berdicevskis (2015) point out that readers use the inherent redundancy of language, relying on alternative cues such as the shape of words, their sounds, and their syntactic and semantic contexts, to recognize meaning. Even in writing that is perceived as concise, there is functional redundancy, allowing competent readers to draw on multiple sources of information to comprehend the text. Grant-Davie (1995) and Dasril et al. (2019) add that beginning readers and writers struggle because they have not yet mastered the use of these redundant pathways to meaning. Therefore, redundancy is not only a common feature of language but also a vital tool for comprehension, especially for more experienced readers.

Functions of Text Redundancy

Redundancy in text serves several important functions across different genres and contexts, playing a pivotal role in enhancing communication effectiveness. Firstly, redundancy can provide clarity and emphasis, reinforcing key ideas and ensuring that critical information is not overlooked (Rathjens, 1985; Bazzanella, 2011). In educational texts, for instance, reiterating concepts can aid in comprehension and retention, allowing learners to grasp complex subjects more thoroughly.

In narrative genres, redundancy can contribute to character development and thematic depth. By echoing certain phrases or motifs, authors can create a sense of rhythm and cohesion, drawing attention to significant emotional or narrative arcs (Baten, 1981). This technique not only enriches the reader's experience but also deepens their engagement with the text.

Moreover, in technical and instructional writing, redundancy can serve a practical purpose by ensuring that essential details are communicated clearly (Horning, 1991; Lotfipour & Sarhady, 2000). Instructions may repeat critical steps or warnings to minimize the risk of misunderstanding, thereby enhancing user safety and effectiveness. Similarly, in legal, formal or scientific documents, redundancy can provide clarity and precision, ensuring that terms are clearly defined and understood, reducing the potential for ambiguity.

In diverse contexts, redundancy can also accommodate varying levels of reader knowledge (Bazzanella, 2011). For example, in scientific writing, where audiences may range from experts to laypersons, repeating foundational concepts can bridge the knowledge gap, making complex information accessible to a broader audience. Additionally, redundancy can foster a sense of connection and familiarity in persuasive writing. By reiterating key arguments or values, authors can strengthen their appeal and resonate more deeply with their audience, making their message more memorable.

Overall, while redundancy is often viewed as a stylistic flaw, its functions across different genres and contexts reveal its potential to enhance clarity, engagement, and understanding, ultimately contributing to more effective communication. Supporting the idea that redundancy improves quality and coherence of a text, Wit & Gillette (1999) distinguished 6 functions of text redundancy: comprehensibility, resolving ambiguity, isolating a feature, contrasting elements, emphasizing or intensifying, creating poetic effect (see Table 12). While text redundancy can serve these functions, it is essential for academic writers to strike a balance, ensuring that redundancy enhances rather than detracts from the clarity and effectiveness of their writing.

Redundancy Reduction

Reducing redundancy is crucial for enhancing the clarity, conciseness, and overall impact of communication. Redundancy, or the unnecessary repetition of ideas, words, or phrases, can obscure the intended message and reduce its effectiveness (Marinashvili, 2020; Dhivya & Koperundevi, 2024). By eliminating non-essential elements without altering the meaning of the text, writers can create concise and focused messages that are easier for the reader to understand. This practice is especially valued in professional and academic writing, where precision and efficiency are key to effective communication (Rathjens, 1985).

Concise and focused communication not only improves clarity but also reflects a high level of professionalism. Reducing redundancy ensures that the audience remains engaged and that the message is delivered in a sharp and purposeful manner. In fields such as academia and technical writing, where complex information is often presented, excessive redundancy can dilute the core ideas, leading to confusion or disengagement. Therefore, mastering the skill of crafting concise and clear messages is essential for maintaining audience interest and ensuring that the intended message is conveyed effectively (Dhivya & Koperundevi, 2024).

However, while eliminating redundancy is typically desirable, some level of repetition is often necessary to ensure communication reliability. In some contexts, reducing re-

Table 12

Functions of Text Redundancy

	Function	Explanation	Examples
1	Comprehensibility	Language from one point of view can be regarded as a communication process. It serves to communicate a message or a feeling to a (potential) audience.	*"Last year I visited the Dar es Salaam, the capital of Tanzania.";* *"I like that marine-colored, blue dress, that hangs over there.";* *"I can't give you money – no."*
2	Resolving ambiguity	In many official occasions precision of expression is needed.	*"the truth, the whole truth and nothing but the truth.";* *"I live in Carbondale, Pennsylvania."*
3	Isolating a feature	In their speech and writing people frequently want to focus on a salient characteristic of a certain object.	*"I love the salty sea."*
4	Contrasting elements	Sometimes, what seems redundant actually contrasts two elements in the expression.	*"I like coffee and you don't."*
5	Emphasizing or intensifying	The redundant feature intensifies the meaning of the expression.	*"The green, green grass of home.";* *"I am completely and entirely crazy about her.";* *"I had a blue, blue Christmas."*
6	Creating poetic effect	It encapsulates all uses of redundancy with no clear semantic purpose, but with an intention to shock, to please, to horrify, to move, etc.	*"Warning. Danger. Stay out."*

Note. The table is based on the information from Wit & Gillette (1999).

dundancy too much can decrease the effectiveness of a message, especially when dealing with complex or technical subjects. Shorter, more concise messages may transmit information effectively, but key points could be lost or not adequately emphasized, making the message less reliable (Bazzanella, 2011). A balance between conciseness and necessary repetition is therefore crucial, as redundancy can help emphasize critical information and ensure it is understood (Tuinman & Gray, 1972).

Redundancy can also serve as a cognitive aid, providing cues that help readers navigate complex or unfamiliar content. When dealing with challenging material, redundancy reinforces key concepts, aiding in comprehension and retention (Albers et al., 2023). In this way, redundancy makes dense information more accessible without overwhelming the reader. This is particularly important in technical writing, where misunderstandings can have significant consequences, and redundancy can act as a safeguard against miscommunication (Lotfipour & Sarhady, 2000).

Excessive redundancy, on the other hand, can negatively affect the readability of a text. Redundant language can slow down the reader and make the text feel repetitive or tedious, ultimately harming its overall effectiveness (Lehmann, 2006;

Xue & Hwa, 2014). Teaching students to eliminate unnecessary redundancy, particularly at the syntactic level, not only enhances the fluency of their writing but also helps them communicate their ideas more clearly. By removing unnecessary repetitions, writers can create sharper, more engaging messages where every word contributes meaningfully to the overall flow of the text (Dawson, 1992; Grant-Davie, 1995).

Clear and logical writing is key to minimizing redundancy and improving comprehension. Writers should avoid vague expressions and redundant phrases, as these can slow down the reader's understanding and reduce interest in the text (Yang, 2021). Using specific language, minimizing generic words, and ensuring that key terms are consistently repeated in the same format can help avoid confusion. Furthermore, cutting unnecessary synonyms and repeated constructions helps streamline the text, making it more coherent and readable, which enhances the reader's focus on the main ideas (Wallwork & Southern, 2020).

Eliminating redundant elements also preserves the original meaning of the text while enhancing fluency. Writers should focus on ensuring that each word in a sentence serves a specific purpose. This approach helps maintain the reader's

attention without overwhelming them with unnecessary information, making the text more effective in academic and professional settings. Careful word choice and cutting out redundant phrases contribute to the overall clarity and precision of the message (Xue & Hwa, 2014; Tikhonova & Mezentseva, 2024).

Despite the general consensus that reducing redundancy improves text quality, redundancy can play a positive role in certain contexts. Redundancy can actually enhance comprehension by increasing predictability and robustness in language. In academic writing, for example, repeating key concepts can help ensure that readers fully grasp the material, particularly in complex or technical texts. In these cases, redundancy serves to reinforce understanding and prevent ambiguity, acting as a tool to improve communication (Leufkens, 2023).

Balancing redundancy is particularly important when the writer is unsure of the reader's level of background knowledge. Writers often employ strategies like «audience unspecificity allowance» by repeating key ideas to ensure that readers with varying levels of expertise can follow the text. This redundancy allows even less knowledgeable readers to engage with the material while providing additional cues that enhance understanding for more experienced readers. As a result, redundancy bridges the gap between different levels of reader comprehension (Lotfipour & Sarhady, 2000; Yang, 2021).

Moreover, redundancy helps compensate for the limits of human cognitive capacity. Readers cannot always focus on every concept in a text, so by repeating key ideas in different ways, writers ensure that critical information is emphasized and easier to recall. This method of using redundancy to safeguard against cognitive overload is particularly useful in academic writing, where dense information can easily overwhelm the reader if not properly reinforced (Lotfipour & Sarhady, 2000; Albers et al., 2023).

While redundancy can make language harder to process in some cases by violating linguistic economy, it also simplifies language by increasing predictability. Redundancy helps readers anticipate and understand content more easily, making texts more accessible while maintaining clarity. This balance between economy and predictability is a key consideration in academic writing, where managing redundancy is essential for producing clear, precise, and comprehensible texts (Leufkens, 2023).

DISCUSSION

The purpose of this review was to explore the phenomenon of text redundancy, its implications for comprehension, and its role in academic and professional writing. The results

demonstrate that redundancy is a complex and multifaceted concept, serving both functional and detrimental purposes depending on how it is applied. By analyzing the various definitions and uses of redundancy across the literature, we have identified key themes that help clarify its impact on communication, as well as the fine line between necessary repetition and wordiness.

The findings of this review reveal a dual perception of redundancy. It affects the text in opposite ways. On one hand, redundancy is often viewed negatively as excessive redundancy which leads to inefficiency and cognitive overload. Studies such as those by Forlini et al. (1982) and Every (2017) argue that unnecessary repetition in a text can obscure the intended message and diminish its clarity. This form of redundancy, commonly referred to as *wordiness*, involves the excessive use of synonyms, filler phrases, or repeated constructions that do not add value to the content. The result is a text that slows down the reader, causing frustration and reducing engagement (Wallwork & Southern, 2020).

On the other hand, redundancy can serve a crucial role in enhancing readability and ensuring comprehension, particularly in complex or technical writing. Smith (1971) and Horning (1991) suggest that when used strategically, beneficial redundancy helps reinforce key ideas, allowing readers to better process and retain information. In this context, redundancy acts as a cognitive aid, particularly for readers who may not grasp complex material upon first reading. This form of *functional redundancy* is essential in academic writing, where precision and clarity are paramount, and repeating important concepts helps reduce ambiguity and misinterpretation (Lotfipour & Sarhady, 2000).

Consolidating Definitions of Redundancy

The diverse definitions of redundancy across the literature suggest a need for a more consolidated understanding of the term. Redundancy is not simply a negative trait in writing; rather, it has both positive and negative aspects depending on its use. Based on the results of this review, the most appropriate definition of redundancy would be: the strategic or unintentional repetition of information, ideas, or structures within a text, which can either enhance clarity and comprehension or lead to inefficiency and cognitive overload, depending on context and audience needs. This definition captures the dual nature of redundancy, recognizing that it can either aid or hinder the reading experience depending on how it is applied.

Moreover, the concept of *wordiness* should be recognized as a specific type of redundancy. Wordiness refers to excessive, unnecessary repetition that does not contribute to the text's meaning or purpose. It detracts from the clarity and efficiency of the message by introducing irrelevant or repetitive elements that slow down comprehension. Thus, wordiness can

be classified as a subcategory of redundancy that focuses on the negative aspects of excessive repetition.

Refining the Concept of Redundancy

The review also emphasizes the importance of understanding redundancy within the broader context of communication. In academic writing, redundancy is not always a sign of poor style; rather, it can be an intentional strategy to ensure the reader fully understands the material. This is particularly important in technical texts or educational materials, where the complexity of the content often requires multiple forms of reinforcement. However, when redundancy crosses into wordiness - where repetition no longer serves a purpose - it undermines the effectiveness of communication. Writers need to be aware of this balance and apply redundancy thoughtfully to enhance, rather than detract from, the text.

Additionally, the findings highlight the challenges that arise from audience variability. Lotfipour and Sarhady (2000) point out that writers cannot always predict the reader's background knowledge or cognitive capacity. As a result, some readers may find a text overly redundant, while others may struggle with under-redundancy. This audience-specific challenge underscores the importance of adaptive redundancy - where writers consciously repeat key concepts to accommodate a broader range of readers. This strategy ensures that readers of varying expertise levels can access and comprehend the material effectively.

Classification of Redundancy

The review proposes a classification system for redundancy based on its function and impact on communication:

(1) Functional Redundancy or Beneficial Redundancy: Intentional repetition that enhances clarity and comprehension by reinforcing key ideas. This type of redundancy is particularly useful in complex or technical writing, where precision is crucial, and repeating concepts ensures understanding.

(2) Wordiness or Excessive Redundancy: A negative form of redundancy characterized by unnecessary repetition that does not contribute meaningfully to the text. Wordiness detracts from clarity and efficiency, leading to cognitive overload and reduced reader engagement.

(3) Contextual Redundancy: Redundancy used to address the varying levels of reader expertise. Writers may repeat key ideas to ensure that less knowledgeable readers can follow the text, while more experienced readers can still benefit from the additional cues provided by redundancy.

This classification allows for a more nuanced understanding of redundancy and its role in communication, recognizing that not all repetition is detrimental. It also provides a framework for writers to evaluate when and how to apply redundancy effectively. The results of this review have important implications for academic and professional writing. Writers should be mindful of the role redundancy plays in shaping the reader's comprehension. While functional redundancy can be beneficial, particularly in technical or educational texts, excessive redundancy (wordiness) should be minimized to maintain clarity and reader engagement. This balance between repetition and conciseness is critical for producing high-quality texts that are both accessible and efficient. Additionally, writing instructors and educators should focus on teaching students how to identify and eliminate unnecessary redundancy while recognizing when repetition can serve a strategic purpose. By understanding the dual nature of redundancy, writers can craft texts that are clear, precise, and tailored to their audience's needs.

Implications. How to overcome redundancy

The outcomes of this review on text redundancy found direct application in the development of pedagogic materials aimed at improving doctoral students' academic writing across disciplines. In this section, we focus on the «Avoiding Text Redundancy in Academic Writing» course, which adopts a genre-based approach informed by corpus linguistics, academic writing studies, and rhetorical analysis (see Table 13). This course is designed for L1 and L2 speakers of English, offering practical strategies to identify and reduce redundancy in their academic writing. The course emphasizes the balance between clarity and conciseness, aiming to eliminate unnecessary repetition that often leads to wordiness.

This course incorporates corpus-based descriptions to highlight redundancy patterns and hands-on analysis of authentic academic texts to demonstrate how different disciplines handle repetition. Course materials are made available to students through the Moodle learning platform, allowing for flexible access to readings, exercises, and discussion forums. These materials include annotated corpus texts and instructional videos that introduce the key concepts of redundancy and rhetorical intent, with exercises designed to solidify knowledge through peer discussion and self-evaluation.

Corpus-Based Materials and Tasks

The course materials are organized around a set of core principles, including the move/step model of academic discourse, which serves as a foundational framework for understanding how redundancy operates within different sections of academic writing. The readings offer compre-

hensive descriptions of rhetorical moves and their functions, illustrating how redundancy may serve either to reinforce or obscure key ideas. Each reading is accompanied by short video lectures in which instructors use excerpts from authentic academic texts to demonstrate redundancy patterns, explain rhetorical intent, and offer strategies for streamlining writing without losing meaning.

Additionally, the course includes a series of corpus-based exercises that guide students through the process of analyzing authentic academic texts. These exercises focus on identifying patterns of redundancy and distinguishing between necessary and excessive repetition. Through this hands-on engagement, students are encouraged to apply the theoretical principles discussed in the readings to their own writing.

To promote deeper understanding and collaborative learning, group discussions are a core component of the course. Students engage in peer review sessions where they critique each other's writing, offering feedback on redundant elements and suggesting improvements. These peer-to-peer interactions, modeled after the approaches advocated by Flowerdew (2008), foster an environment of shared learning and critical reflection. The feedback provided in these sessions helps students refine their writing by reducing redundancy and enhancing the clarity of their arguments. The course's structured peer review process is complemented by detailed guidelines on how to evaluate redundancy in academic writing. These guidelines encourage students to assess whether their writing and that of their peers are clear, whether key ideas are effectively communicated without excessive repetition, and whether the argumentation is sufficiently concise. By focusing on these key elements, students learn to apply critical thinking to their writing, improving both their own texts and those of their peers.

Swales (2014) emphasizes that tasks should be designed to be sequenced and goal-directed, drawing upon a range of cognitive and communicative procedures. In alignment with

this view, the course integrates differentiated activities that scaffold learning from initial identification of redundancy to the practical application of revision strategies. The tasks are structured to progress from the analysis of self-compiled corpora to the revision of drafts, allowing students to gradually build their skills and apply them in context.

The course also uses annotated corpora, made accessible through tools like Callisto, to support students in conducting a detailed analysis of redundancy in authentic academic texts. These annotated texts highlight common linguistic patterns that contribute to redundancy, such as excessive use of synonymous terms or unnecessary phrases. By exploring the annotated corpus, students learn to identify redundancy across various disciplines and develop strategies for avoiding it in their own writing.

By the end of the course, students are expected to apply the corpus-based techniques they have learned to revise their own research article drafts, reducing unnecessary repetition and improving clarity. Through the combination of theoretical instruction, hands-on corpus exploration, peer feedback, and iterative revisions, the course equips students with the tools necessary to produce clear, concise, and effective academic writing. The goal is to help students reduce redundancy while maintaining the coherence and clarity of their arguments (see Table 14).

Mapping of Materials and Tasks to Specific Course Modules

The course "Avoiding Text Redundancy in Academic Writing" is structured into five comprehensive modules, each targeting a specific aspect of identifying, analyzing, and eliminating redundancy in academic writing. The course is designed for doctoral students across disciplines and offers a detailed, hands-on approach to improving clarity and conciseness in research papers and other academic texts. The pedagogical approach integrates theoretical instruction

Table 13

Course Module Description and Focus

Module	Topics and Focus
Module 1: Understanding Redundancy	Introduction to redundancy and its aspects in academic writing. Corpus compilation and analysis of redundancy patterns.
Module 2: Reducing Wordiness	Identifying unnecessary repetition and applying strategies to reduce wordiness in academic texts.
Module 3: Corpus-Based Exploration	Hands-on analysis of annotated corpora to examine the function of redundancy across different disciplines.
Module 4: Enhancing Argumentation	Balancing repetition with clarity in academic argumentation. Revising drafts for conciseness and coherence.
Module 5: Peer Review and Final Project	Peer review sessions focused on redundancy. Final project submission with revisions based on feedback.

with practical tasks, corpus-based analysis, peer review, and iterative revisions, allowing students to apply the concepts directly to their own writing. Below is a detailed description of each module, including its focus, activities, and materials.

Module 1. Understanding Redundancy in Academic Writing

The first module introduces students to the concept of redundancy in academic writing, explaining different types of redundancy, its reasons, functions, tools and strategies to detect and overcome. This part of the course sets the stage for the subsequent modules. The main focus is to help students recognize the different forms of redundancy that can appear in research articles, such as unnecessary repetition of ideas, redundant phrases, or the overuse of similar transitions.

Students begin by compiling a self-curated corpus of 10-15 research articles from reputable journals in their field of study. These articles are required to be recently published and written by different authors. This task encourages students to become familiar with the structure and style of contemporary academic writing in their disciplines while paying close attention to patterns of redundancy. After compiling their corpus, students conduct a preliminary analysis, noting redundant elements, transitions, and section structures in the articles.

Following the individual analysis, students participate in group discussions where they compare their findings with peers. They analyze how different authors handle redundancy and discuss when repetition may serve a rhetorical or functional purpose, such as reinforcing key ideas, and when it may become excessive or unnecessary. Through these discussions, students gain a deeper understanding of how redundancy can either enhance or hinder clarity and how authors in their field manage repetition to create more effective texts.

Materials used: self-compiled corpus of research articles, readings on redundancy in academic writing, group discussion materials and notes on redundancy patterns.

Module 2. Identifying and Reducing Wordiness

The second module focuses on the practical skills necessary to identify and reduce wordiness, which is a specific form of redundancy in academic writing. Wordiness occurs when unnecessary words, phrases, or overly verbose expressions are used, making the text difficult to follow and less efficient.

Students are provided with sample academic texts that include redundant expressions, verbose phrases, or unnecessary synonyms. The first task is to identify and analyze these examples of wordiness. Students compare the original texts with revised versions that have been edited for conciseness, observing how the removal of redundant words improves the clarity, flow, and readability of the text without sacrificing the intended meaning. Once students understand the principles of identifying wordiness, they are tasked with applying these techniques to their own writing. Each student selects a section from their research paper, thesis, or dissertation draft and revises it to eliminate redundant elements. This exercise not only improves the clarity of their writing but also helps them develop the skills to critically evaluate their own work.

The module also includes peer review sessions, where students provide feedback on each other's revisions, identifying remaining instances of wordiness and offering suggestions for further improvement. This peer-to-peer interaction encourages reflection and collaborative learning.

Materials: sample academic texts with redundant elements, revised versions of these texts for comparison, student's own research drafts, peer review guidelines and rubrics for evaluating conciseness.

Table 14
Types of Materials and Assignments in the Course

Materials	Tasks
Self-compiled corpus	Writing and revising research article draft
Video lectures, readings	Identifying redundancy and discussing strategies to reduce it
Corpus-based exercises, rhetorical analysis hand-outs	Group work and discussion on redundancy patterns in academic texts
Annotated corpus, Callisto	Rhetorical analysis of redundancy patterns in research articles
Annotated corpus, Callisto	Language use analysis focused on redundancy; online discussion forum
Self-compiled corpus, Callisto	Annotation of redundant elements
Student research article draft, Callisto	Peer review and annotation of first draft for redundancy
Move/step model-based guidelines	Revision of research article drafts focusing on reducing redundancy

Module 3. Corpus-Based Exploration of Redundancy

In this module, students move into more advanced, data-driven analysis using corpus-based tools. The goal of this module is to deepen students' understanding of redundancy by allowing them to explore how repetition functions across different disciplines and research texts. Using these tools, students can identify where redundancy serves a clear rhetorical or functional role and where it becomes excessive.

Students are introduced to corpus-based tools such as Callisto and concordancers, which allow them to analyze the annotated corpora provided for the course. The annotated corpus includes examples from a range of academic disciplines and highlights linguistic and structural redundancy. Students are asked to explore different sections of their self-compiled corpus (from Module 1) using these tools to investigate how redundancy manifests in introductions, literature reviews, results, and discussions. They focus on identifying linguistic markers of redundancy, such as overuse of certain phrases, excessive synonyms, or unnecessary repetition of concepts.

In group sessions, students share their findings, discussing which aspects of redundancy are common in their field and how authors typically manage them. This exploration helps students recognize discipline-specific patterns of redundancy and apply them to their own writing. The corpus-based analysis also provides students with insights into how other researchers have effectively reduced redundancy without losing clarity or emphasis on key points.

Materials: annotated corpora from various disciplines, corpus analysis tools (e.g., Callisto, concordancer software), self-compiled research corpus from Module 1, guidelines for corpus-based analysis tasks.

Module 4. Enhancing Academic Argumentation

Building on the skills developed in the previous modules, the fourth module shifts the focus towards refining academic argumentation. The objective here is to teach students how to maintain a balance between necessary repetition for emphasis and conciseness for clarity. Academic argumentation often requires a careful approach to redundancy, where key points must be reinforced without over-explaining or becoming redundant.

Students begin by analyzing the argumentation in their self-compiled corpus, paying particular attention to how repetition is used in the structure of introductions, methodologies, discussions, and conclusions. They identify instances where authors repeat important points to emphasize their arguments and note how this is done effectively, without overloading the reader with unnecessary repetition.

Following this, students apply these insights to their own writing. They are tasked with revising the argumentation in their drafts, reducing redundancy while ensuring that their key arguments remain clear and coherent. The focus is on identifying sections where repetition has been overused and finding alternative ways to express or emphasize the same points more concisely. Instructor feedback is provided to each student, with personalized suggestions on how they can improve the logical flow and clarity of their argumentation.

Materials: annotated corpus examples highlighting argumentation patterns, student research article drafts, instructor-provided feedback templates on redundancy in argumentation.

Module 5. Peer Review and Final Project

The final module of the course involves peer review sessions and the completion of a final project, allowing students to put all the skills they've acquired throughout the course into practice. This module emphasizes collaborative learning through peer feedback and the refinement of writing based on constructive critique.

Students engage in structured peer review sessions, using a detailed rubric to evaluate each other's drafts for redundancy, clarity, and conciseness. The peer review focuses on whether unnecessary repetition is present and whether the text can be improved by reducing wordiness. Students provide detailed feedback on how to streamline writing and enhance the overall clarity of the argumentation. After receiving peer feedback, students revise their drafts for a final submission. The final project requires students to submit a fully revised research article draft, demonstrating improved conciseness and clarity, along with a reflective report. The report asks students to reflect on the revision process, outlining how they applied the redundancy reduction techniques learned throughout the course and what impact these revisions had on the overall quality of their writing.

Materials: peer review rubric for evaluating redundancy and clarity, student research article drafts, reflective report template for final project submission.

Course Limitations

The course presents several practical challenges. One limitation is the time-intensive nature of corpus-based tasks, which may not be feasible for all educational settings. The course also relies heavily on access to annotated, discipline-specific corpora, which may not be available to all students. Moreover, the course requires students to have a working familiarity with corpus tools, which could pose a challenge for those without prior experience in linguistics

or academic writing analysis. Despite these limitations, the course structure provides a comprehensive framework for doctoral students to develop their writing skills by minimizing redundancy and enhancing the clarity of their academic discourse.

In some contexts, teachers may need to adjust the course's interactive and corpus-based activities to fit within tighter schedules. For example, corpus exploration tasks could be assigned as homework, while classroom time is devoted to discussions of the findings. As corpus representativeness grows over time through student annotations, future iterations of the course will have access to a broader range of examples, allowing for more precise analysis of redundancy patterns across disciplines.

CONCLUSION

This review examined the dual nature of text redundancy and its role in communication, especially in academic and professional writing. The findings suggest that redundancy can either improve comprehension by reinforcing key ideas or detract from communication when it results in excessive repetition or wordiness. The review consolidates redundancy as the strategic or unintentional repetition of information or structures, which can either aid or hinder communication based on its context and purpose.

The classification of redundancy into functional (beneficial) redundancy, wordiness (excessive redundancy), and contextual redundancy provides a useful framework for writers to manage repetition more effectively. Understanding these categories allows writers to make informed decisions about when to employ redundancy for emphasis and when to avoid it to maintain clarity. Balancing necessary repetition with conciseness is crucial for maintaining clarity and reader engagement, as excessive redundancy can lead to reader fatigue and disengagement, while well-placed repetition can enhance retention and understanding.

The limitations of this review include its primary focus on written communication, leaving the role of redundancy in other mediums, such as spoken or digital communication, underexplored. While the nuances of written texts have been examined, the dynamics of redundancy in oral communication, where tone, inflection, and immediacy play significant roles, remain largely unaddressed. Additionally, the review provides general insights into academic writing without delving deeply into the varying uses of redundancy across different academic fields or genres, which can exhibit distinct conventions and expectations regarding repetition.

Future studies should focus on exploring redundancy in digital communication, including social media, email, and online academic platforms, where brevity is often prioritized. The unique characteristics of these platforms may influence how redundancy is perceived and utilized, offering a rich area for investigation. Additionally, research on how redundancy functions in oral communication, presentations, or instructional settings would provide valuable insights into the effectiveness of spoken repetition and its impact on audience engagement and comprehension. Understanding redundancy in these contexts could lead to more effective communication strategies tailored to specific audiences and situations.

Finally, discipline-specific studies on redundancy within different academic fields could reveal more nuanced ways in which repetition supports or detracts from the clarity and effectiveness of communication in specialized contexts. Different fields may have varying tolerance levels for redundancy based on their conventions, audience expectations, and the complexity of the subject matter. By examining these aspects, future research can contribute to a more comprehensive understanding of redundancy as a multifaceted phenomenon that plays a critical role in effective communication across diverse contexts. Such insights could ultimately inform best practices for writers and speakers, enhancing their ability to convey ideas clearly and effectively in both academic and professional settings.

DECLARATION OF COMPETING INTEREST

None declared.

AUTHOR CONTRIBUTIONS

Elena Tikhonova: conceptualization; data curation; formal analysis; investigation; methodology; project administration; resources; software; supervision; validation; visualization; writing – original draft; writing – review & editing.

Daria Mezentseva: data curation; formal analysis; investigation; software; visualization; writing – original draft.

Petr Kasatkin: data curation; investigation; methodology; software; visualization; writing – original draft; writing – review & editing.

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APPENDIX 1

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