



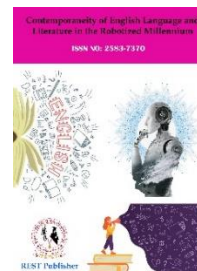
Contemporaneity of English Language and Literature in the Robotized Millennium

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From Anglo-Saxon to Global Linguistics: A Quantitative Analysis of English Language Development

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Abstract: This study examines the historical development and evolution of the English language using Grey Relational Analysis (GRA) to assess various aspects of its development over time. The research analyses four main dimensions: linguistic development, language standardization, global diffusion and historical context. The study demonstrates that the development of English over time has had the most significant impact on its current form, achieving the highest Grey Relational Grade (GRG) of 0.7147. This is followed by the Origins and Development Phase (GRG: 0.6360) and Historical Perspective (GRG: 0.5956), with historical roots showing the least influence (GRG: 0.3500). This research follows English from its Germanic roots through the Anglo-Saxon period, the Norman Conquest and the modern era, highlighting how various cultural and linguistic influences have shaped its evolution. The findings indicate that language standardization has played a major, especially its later stages, while the global spread of English has been significantly influenced by factors such as international trade, technological progress, and cultural exchange. The study also reveals the dynamic nature of English as a way of life that is constantly adapting to new social, economic, political, and technological developments. The analysis uses normalized data and deviation sequences to establish the relative importance of different developmental stages, providing a quantitative framework for understanding the evolution of the language. Although historical roots are fundamental, the results suggest that the ongoing development and adaptation of English have been more influential in shaping its current global status. This research contributes to our understanding of language evolution and provides insights into how English has become a global language while maintaining its capacity for continuous adaptation and change.

Keywords: English language evolution, Language standardization, Historical linguistics, Global language development, Linguistic development stages, Language origin analysis, Anglo-Saxon influence, Language change, Linguistic quantitative analysis.

1. INTRODUCTION

The field of English Language Teaching has evolved into a significant global, cultural and intercultural endeavour in recent years. As distances shrink, national borders blur, and regional and transnational economies take precedence, the opportunities for interaction between a wide ranges of languages have grown significantly, and the role of English is becoming increasingly important. As a result, there are no prior examples of the consequences that arise when a language gains global importance. What effect does this spread have on native English speakers? on those who speak it as a first or second language, despite its significant global importance? This question, usually examined from a sociological and attitudinal perspective, has affected the now appears be reshaping language competence and professional practices in the ELT field. While this distinction is true for black-white language cases, Today's physical, technological, economic and migration patterns, it no longer applies reliably to English [1]. Between these recent publications and the 1990s, Gradient, Shelton, Emerson, and Humble focused on determining language use in different parts of the country, using personal observation and well-prepared questionnaires administered to knowledgeable observers, an area that had previously been overlooked in the United States. The history of our accent has received even less attention, and although these scholars have paid attention to it, they have not extended their research very deeply. As a result, our understanding of these issues is less clear today than it was thirty years ago, although recent articles by W. Read on Southern accent have

considerably expanded our knowledge in that field [2]. Languages are not static entities; they are constantly changing, varying over time and geography. Although Dutch and German are accepted as separate languages with distinct vocabulary, grammar, and orthography, this difference is largely due to forced standardization. When observing the realities in the field, it becomes clear that local dialects gradually blend into each other. Static languages, like countries, are artificial, they have no inherent foundation, and the definition of their borders is often arbitrary. In today's globalized world, English has assumed significant importance as the primary language of communication. When we consider its historical development, this modern importance contributes to a public good that cannot be justified otherwise. Before the end of World War II, when American influence, whether positive or negative, became more influential, English did not occupy a prominent place in the minds of educated Europeans [3]. Willowick is still a matter of debate; at the heart of this controversy is the conflict between the findings of most academic studies indicating the language's Germanic roots, and the self-identification of the people of Willowick as non-German. The idea of a non-German Visconti origin is important in local folklore and some in addition to Irenic, the West Germanic language family is divided into Istvianic, which includes Dutch, Flemish, and Afrikaans, and Ingvianic, and this includes English, Scots, Low German, and Frisian [4]. In essence, communication is essential to human existence in any society. However, in modern societies, communication has transcended the need for participants to physically gather in one place. The size and diversity of contemporary society have made such direct interactions impractical. The invention of printing and the rise of broadcasting technology have made public relations a reality in modern society. Furthermore, mass media, which are often non-profit, play a vital role in educating, informing, entertaining, and socializing individuals. If we accept that mass media are essential to our political and social transformation, we must consider the importance of making this transformation accessible to the public. It is crucial to produce news that is culturally relevant, linguistically appropriate, and aligned with the social realities of our people [5]. A key characteristic a characteristic of human language is that it is learned and culturally transmitted through socially mediated interactions. from one generation to the next, and varies considerably within and between societies. A growing body of research shows that Human culture and language are deeply interconnected intertwined from an evolutionary perspective. Initially, we will examine the current understanding of animal gestural communication, which implies that gestures are important in Language Development, we explore the debate over the origin of gestures and propose an evolutionary scenario. Then, we present four theories of the origin of language: the vocal theory, and the multiple causal theory, followed by an evolutionary perspective on how language evolved conclusion, we emphasize key points that advance our understanding of the diversity of purposeful and functional communication systems in both humans and nonhumans [6]. The passive construction is illustrated in sentences such as "He was arrested". The theoretical contribution of the article lies in proposing ways to regulate and promote the process of morph syntactic reanalysis, to improve our understanding of syntactic change more broadly [7]. The year 1995 is widely considered the starting point of the new field of history pragmatism, as a volume entitled "Historical Pragmatism" was published that year, giving This sector received focused attention and initial coherence. However, this volume emerges alone. It is important to examine how the field of pragmatism developed over the twenty years that followed. It was relatively easy to find researchers interested in contributing to the historical pragmatism volume in the early nineties, and this helps to explain why the field has advanced so rapidly since then, what has emerged from it, and where it is headed today. This is linked to changes in how scholars perceive language and what is considered innovative and worthy of imitation. In this article, we aim to analyse some of the changes that led to the emergence of historical pragmatism in the nineties and to look back at how these changes continue to shape the research questions considered relevant, the data Along with the analytical methods used, the study was conducted [8]. European, Asian, and African nationalization campaigns, faced with the challenges posed by dialect and language diversity, all promoted Designating specific dialects or languages as national languages, and some cases attempted to impose them. However, in the colonial movement that led to the pursuit of Following American independence, nationalists did not feel the need to create a unified "national" language to challenge competing dialects or languages. This distinctive feature of American revolutionary nationalism and nation-building is known from the earlier colonial experience. The societies that created the new nation developed as colonies of foreign settlers, and their social evolution shaped the linguistic development of colonial English. In the early to mid-eighteenth century, a form of English emerged that many observers considered consistent and similar to metropolitan Standard English [9]. The Black English Inquiry in Ann Arbour provided a way to address this contradiction. The early decade of research on Black English was marked by sharp disagreements between creolises and dialectologists about the structure and origins of the dialect a unified perspective began to emerge in the widespread response by linguists to the idea that black people were linguistically and genetically inferior. In bilingual education research, scholars often participate in public discussions, the use of a language serves a political purpose and an educational strategy. When testifying about to improve the objectivity and clarity of legal language, linguists participate in courtroom adversarial practices, where the key issues are unrelated to the language forms This type of engagement may differ significantly from the neutral approach to verification and refutation that is fundamental to proper scientific practice [10]. To accomplish this, we need a clear understanding

of what is considered 'non-linguistic' and 'linguistic' to understand the course of change being studied. The authors leave this distinction to the reader. Since they do not provide a precise definition of 'language', they hope that what is provided will be understood intuitively. From a functional perspective, any action that helps to express ideas or opinions in a discursive manner would be considered 'language'. For example, if I could inform you through my unique pantomime and vocal growl that there was a leopard near the camp last night, that would be considered an instance of 'language' from this perspective. The question of how 'language' originated in this sense is related to the broader inquiry into the origins of language. On the other hand, according to the formal definition of 'language', this discourse about the leopard's visit last night would not be considered 'language' because the actions I used to convey my message are very regular and arbitrary in how their forms correspond to their meanings. These actions can be analysed as elements of exchange that only serve to maintain the differences between the forms used [11]. As an important feature of spoken prose, prepositional focus has long been acknowledged, either explicitly or implicitly. The traditional school of English phonetics has largely focused on the concept of atomic Tone, considered the main component of a sentence, is defined as follows. The concept of nuclear tone is also acknowledged in AM phonetic theory, although this theory does not distinguish any fundamental differences between nuclear and pronuclear tones. A key feature of the nuclear tone is considered to mark the last major internal movement in an utterance, with subsequent changes being less significant movement, referred to in the British tradition as a "tail", being much smaller in magnitude. This may be because when analysing internal patterns, large pitch movements around the nucleus are easily overlooked without properly accounting for their functional significance. In experimental studies, a question-answer paradigm has been developed to systematically manage the presence and position of what is commonly referred to as sentence focus and to examine how sound patterns vary with stress [12]. The interdisciplinary field of emotion studies does not take a historical perspective on translation issues. In modern scientific literature, mostly published in English, the term "emotion" Often used as a term that encompasses all languages, periods, and contexts. Semantic domains of emotion words differ In English, French, and German, all three languages played a role in the study of emotion in 19th-century psychology, and the scientific concept of emotion was developed during that period developed. In addition, although "emotion" has become synonymous in French and English, "emotion" and "emotional" are not used interchangeably, and the term "affect" also presents its challenges. Translation problems have obscured the epistemological questions that 19th-century German and French psychologists raised with contemporary Anglophone psychologists and historians of emotion about the concept of "emotion." These translation challenges arise at several levels [13]. If letters have historically been derived from a direct understanding of meaning, then Drabs uses the argument about logographic origins to argue that the current focus in reading research on more letter rules, such as letter sounds or grapheme-phoneme relationships, is linguistically unnatural and unnecessary for teaching reading. Furthermore, this logographic origin uses whole-language reading methods that prioritize meaning from the beginning, rather than focusing on directly learning grapheme-phoneme rules (decoding). Strauss concludes that, like oral language, written language should be acquired "naturally," with each child learning its rules through the same linguistic environments that support its oral development [14]. This article aims to compare classical and medieval translated literature with modern postcolonial literature. It examines works that involve multiple languages, different languages, or a second language. From a historical perspective, it considers the rise of the Roman Empire and the adoption of Latin in classical literature. In addition, it examines the development of dialects as dominant languages in Europe during the middle Ages, highlighting how languages were shaped by translation authors and texts. The recent emergence of new vocabularies and structures reflects changes in social, economic, political, and technological landscapes, all of which call for new modes of communication. Terms such as 'translation', along with related concepts such as 'transnational,' 'cultural,' and 'diaspora,' have emerged in response to concerns around communication in a variety of twentieth-century fields, including communication studies, literature, migration studies, post colonialism, border studies, diaspora, linguistics, ethnicity, and cultural practices. [15].

2. MATERIALS AND METHOD

Historical roots of the English language: Originally rooted in the dialects and vocabulary of the Germanic tribes of the Angles, Saxons, and Jutes who settled in Britain in the 5th century AD, English has since been influenced by a variety of cultures and languages, including Latin, French, Dutch, and African, to become a vibrant and evolving language. Old English developed from a collection of Anglo-Frisian or Ingvonian dialects spoken by the Germanic tribes known as the Angles, Saxons, and Jutes.

Evolution of the English language: Language evolution applies the principles of evolutionary theory to the study of language. Since we typically associate evolution with changes in biological populations, it is helpful to begin with a definition of the concept. The history and development of the English language is a fascinating topic

spanning over a thousand years. It traces its origins A Germanic language spoken by the Anglo-Saxon tribes in the 5th century, and eventually expanded to become a dominant language worldwide. The theory of evolution states that language developed gradually over time in response to evolutionary forces such as environmental changes or population growth. This theory states that language evolved to its current form gradually, rather than appearing suddenly all at once.

Development of English over time: The English language was created by integrating words, phrases, and other elements from various languages, including Latin and Romance languages. Words borrowed from one language and incorporated into another language with little or no change are called loanwords.

Origin and the evolution of the English language: English language traces its origins to Old English, an early form that emerged in the 7th century AD. It later evolved into Middle English in the 12th century, which represents an intermediate stage between Old English and Early Modern English. Unlike languages that originated and developed within a specific country or region, English has expanded across borders, driven by conflict and conquest since its beginnings around 1,600 years ago. Throughout its journey, it has continued to evolve as it spread across the globe, absorbing elements from various languages.

Historical overview of the English language: Proto-English (early Anglo-Saxon) evolved from West Germanic languages around 476 AD. The origins of English are known to have come from the languages spoken by the Germanic peoples of northern Europe. During the Roman Empire, most Germanic languages remained separate from Rome, although some south-western regions were incorporated into the empire. Today, Modern English is widely spoken. Recognized as a global language of communication and serves as a standard in various fields such as Computer programming, global business, and higher education.

Linguistic development: Linguistic language development refers to the stage at which words and symbolic communication begin to emerge. This process this can be classified into six levels: initial one word, then one word, two words, three words, four words, and complex utterances. Language helps children build relationships, express their emotions, and engage in social interactions. Effective communication helps them develop positive relationships with peers and teachers, fostering greater self-confidence and self-esteem. The linguistic learning theory of language development is rooted in the work of American linguist Noam Chomsky, a key figure in modern cognitive science. Chomsky's theory suggests humans are naturally equipped with the ability to learn language.

Language standardization: According to Warded (2006), the process of standardizing the language is “the process by which a language is codified in some way.” This process generally grammars, spelling guides, dictionaries and sometimes a literary anthology. Standardized English refers to a widely recognized and consistent version of the language that follows established rules of grammar, vocabulary, spelling, and pronunciation. Its purpose is to promote clarity and consistency in communication, and it is typically used in formal or polite contexts.

Global spread: The roots of modern globalization can be found in several key events in the 19th and 20th centuries, such as the introduction of the gold standard and the global integration of financial markets. In each case, the progress of globalization has been driven by the invention and advancement of new technologies.

Historical context: Historical context refers to the details of a particular time period, the events that occurred during that time, as well as the attitudes of the people who lived during that period. On the other hand, literary context provides the reader with the information necessary to fully understand the events of the story. Historical context acts like a time machine, transporting us to the time period in which a story takes place. It helps us understand what life was like during that time, providing background information that sets the scene for the story. This includes details such as the time period, location, social norms, and significant events of the time.

GRA Method: Design of Experiments (DOE) gives the experimenter complete control over whether the data collected is consistent or not. It also emphasizes the analysis of signal-to-noise ratios for individual responses to determine optimal conditions and assess overall performance, often using techniques such as Gary Relational Analysis (GRA) to optimize multiple responses. The goal is to achieve the best outcomes across all responses [16]. GRAS proteins are part of a plant-specific transcription factor family. To date, 33 GRAS members have been identified, including a pseudo gene expressed in the Arabidopsis genome. Using a reverse genetics approach, we have constructed a “non-essential event-ready set” of GRAS genes in .This set focuses on loss-of-function

mutations in 23 novel GRAS members. Under standard conditions, homozygous mutations did not show significant morphological differences compared to wild-type plants. Seeds were obtained from ABRC, NASC, and RIKEN to establish a specific non-essential seed collection.. The generated PCR products were sequenced to confirm the status of the GRAS gene insertion mutation collection, and T-DNA or transposon insertion mutations in the GRAS genes were identified by searching the SALK database. [17]. GRA addresses MADM problems by integrating the full range of performance attribute values for each alternative into a single value, simplifying the original problem into a single-attribute decision problem. As a result, alternatives with multiple attributes can be easily compared after applying the GRA method. This paper examines two MADM problems, both of which focus on comparing multiple alternatives based on different attributes. The first problem involves facility layout design, while the second concerns dispatch rule selection. In the first case, GRA was used to determine the optimal plant layout from eighteen alternatives, considering six attributes for an IC packaging company. In the second case, GRA was used to rank nine dispatch rules based on five attributes in a hybrid flow shop environment. Empirical examples from both case studies illustrate the effectiveness of GRA in solving MADM problems. [18]. Health management and prediction are important aspects of predictive maintenance and have received increasing attention from researchers due to their significant impact on reducing maintenance costs and improving the productivity of industrial systems, especially in machines that involve rotating components, is greatly affected by bearings, which are critical components. Bearings have received significant attention, especially in efforts to predict their remaining useful life (RUL). Bearing fault diagnosis generally relies on vibration signal analysis across the time domain, frequency domain, or time-frequency domain. In predicting RUL, statistical features from the time domain, such as root mean square (RMS), kurtosis, and crest factors, are commonly used. Using the minimum measurement error (MQE) from SOM as an indicator, the authors combined self-organizing graphs (SOM) and artificial neural network (ANN) techniques. The SOM network was initially trained with normal motion data to set a threshold. Following this, a feature vector associated with an error was introduced to estimate the deviation from a predetermined threshold [19]. The above-mentioned network selection strategies had their advantages, but they were primarily designed to meet the needs of individual mobile users, with factor weights set objectively. However, these strategies do not sufficiently consider system performance and are computationally demanding. In this paper, we present a GRA-based network selection mechanism that more accurately captures the impact of network conditions on user selection. A formal grey correlation analysis, widely used within grey system theory, is a technique for assessing the degree of similarity between analyzed schemes and reference schemes. If the similarity between the analyzed scheme and the reference scheme is high, relativity [20]. With the rapid economic development in our country, pollution from industrial and daily activities has contributed to increasing soil degradation, which poses a significant challenge to the sustainable development of both society and economy. Heavy metal pollution disrupts the normal functioning of soil, leads to contamination in the food chain and poses significant risk to human health and the environment. A grey system refers to a system in which some information is known or undetected, while other parts are unknown or undetected. The grey theory, introduced by Professor Zhulong Deng in 1982, has been applied in various fields. Based on this theory, grey correlation assessment is a comprehensive method that uses GRA to assess factors that are poorly defined or challenging to measure. Since data on heavy metal content in soil are collected within a limited range, the soil ecosystem can be viewed as a grey system, meaning that the information provided by the data is incomplete or uncertain [21]. Most helicopter accidents Engine and drivetrain failures are a major cause of many problems. To minimize these mechanically induced failures and minimize unnecessary maintenance, it is critical to accurately detect and diagnose faults within the engine system. This causes gradual damage to the gear teeth, ultimately leading to complete failure of the planetary gear sets. Early detection of this fault is challenging because it occurs deep within the main transmission. Due to its critical nature and the issues involved, the topic of damage assessment for planetary gear sets has been extensively researched with numerous advanced articles published in leading journals and conferences [22]. This research takes a demand-driven approach it uses the grey structure method to analyse the effect of international raw material prices on the BDI. In addition, the entropy method is used to estimate the magnitude of this influence. The empirical results of this study provide valuable insights and recommendations to assist ship owners, ship charter companies, and shipping companies in operational decision-making and the development of hedging strategies. GRA is a quantitative analysis method used to examine the similarities and differences between factors in the development of dynamic processes. It introduces a measure of dependence to assess the relationship between factors, with the correlation increasing as the similarity increases. GRA assesses the geometric closeness between different sequences within a system. When the geometric shapes of the variables are the same, the patterns of change more closely aligned, resulting in a larger coefficient value. The goal of GRA is to identify the grey correlation sequence, and the ranking is used to determine the relationship.

Before calculating the grey correlation rank, the data must be subjected to pre-processing [23]. In this context, trade credit plays a key role in capital structure decisions, linking the liabilities on a company's balance sheet to its assets. Within the framework of grey systems, grey relational analysis (GRA) is a very A valuable approach to tackling various material-based decision-making challenges problems. Its popularity stems from its simplicity and minimal modelling requirements. Over the past few decades, GRA has been widely used many fields, such as wireless broadcasting system selection, workforce planning, wastewater treatment optimization, data collision resolution, and many others [24]. This research uses the AHP evaluation method to analyse the various factors that contribute to medical disputes and propose preventive measures. Finally, the three medical centres are selected for the study, where the factors are examined and analysed to identify which hospital is associated with Very serious medical disputes. Medical disputes can be avoided by implementing precautionary measures. This study identifies the main factors that contribute to medical disputes, provides potential strategies for preventing such disputes in hospitals, while also helping to reduce associated costs [25]. Transcription factors are key regulators of various physiological processes in higher plants. These proteins are involved in various physiological processes throughout the plant life cycle. Because of the significant differences in the amino acid sequences within each subfamily, each may perform unique functions. Until recently, the GRAS gene family in cassava had not been investigated. In this study, members of the GRAS gene family were identified using an existing cassava genome database. A phylogenetic tree was constructed, and analyses of intervening motifs and gene exon/intron structures were performed. In addition, Me GRAS genes were mapped to cassava chromosomes, and the cist-elements of these genes and the interaction network of Me GRAS proteins were analyzed. [26]. Blood donation is crucial for saving lives and serves as a basic requirement in medical treatments. In many developed countries, donors donate blood voluntarily, and the number of new voluntary donors is constantly increasing. However, in developing countries, blood donation is often compensated rather than voluntary. Blood transfusions are essential in addressing various health conditions worldwide. Grey relational analysis (GRA) is very useful in addressing complex relationships between multiple factors and variables. It provides a straightforward and accurate approach to identifying relationships between variables and determining which factor has the most influence on a decision. A key advantage of GRA is its ability to accurately process ambiguous, unrelated, and incomplete information. In addition, GRA is a multi-attribute decision-making method that effectively handles organizational uncertainty [27]. Credit risk is the risk that a borrower, lender, or counterparty may be unable or unwilling to fulfil contractual obligations, leading to financial losses for banks, investors, or businesses. This type of risk is widespread across various economic entities. For listed companies, credit risk includes factors such as defaults on payments, defaults on loans, and other breaches of contractual commitments that distinguish them from other businesses. Even in the most developed markets, breach of covenants is a common problem. In our country, some listed companies originate from state-owned enterprises, which often face inherent weaknesses in corporate governance. Every financial quarter is crucial for listed companies, as their drive to increase economic performance may further increase credit risks. Implementing scientific and systematic credit risk assessment through a credit risk management model can significantly improve the efficient allocation of capital [28]. Given the widely available scientific data supporting enzyme safety, along with established among the peer-reviewed methods and decision trees for assessing the safety of microbial enzymes used in food processing and animal feed, the GRAS process is the most appropriate approach for evaluating enzymes. Because humans are not directly exposed to these enzymes through consumption of products derived from target animals, their impact on human food safety is generally not a major concern. This process involves providing detailed information on the identity of the enzyme, source (including a description of the producing organism), method of production, technological applications, safety studies, and assessment of human exposure, as outlined in the FDA/CFSAN Enzymes Guidance. Specific requirements are further explained below. [29]. In the analysis of uncertain and incomplete systems, Grey Relational Analysis (GRA) focuses on addressing the challenges related to “small data samples, limited information, and uncertainty” that traditional statistical methods struggle to handle. Since these challenges are similar to those found In Content-Based Image Retrieval (CBIR), an effective feedback mechanism is a suitable approach. In an interactive content-based image retrieval (CBIR) system, user queries can often be vague and subjective, which can lead to some uncertainty in the retrieval results. GRA serves as a useful method for understanding user queries in interactive CBIR, especially in improving the selection of query parameters [30].

3. ANALYSIS AND DISCUSSION

TABLE 1. Origins of the English language history

	Linguistic development	Language standardization	Global spread	Historical context
Historical roots of the English language	8.00	1.00	9.00	19.00
Evolution of the English language	13.17	5.00	8.00	23.00
Development of English over time	9.00	19.00	1.00	7.00
Origin and development of the English language	12.00	25.00	5.00	9.00
Historical overview of the English language	10.00	41.00	7.00	14.00

Table 1 presents various aspects of the evolution of the English language, categorized by linguistic development, language standardization, global diffusion, and historical context. It highlights the historical roots of English, showing its foundational impact on its linguistic development and global diffusion. The evolution of English reveals a balance between development and standardization, emphasizing how the language has developed both domestically and internationally. Over time, language development has shifted toward a larger historical context, as evidenced by fluctuating values across a variety of categories. This reflects the dynamic nature of English, whose historical perspective demonstrates its increasing importance in standardization and global expansion.

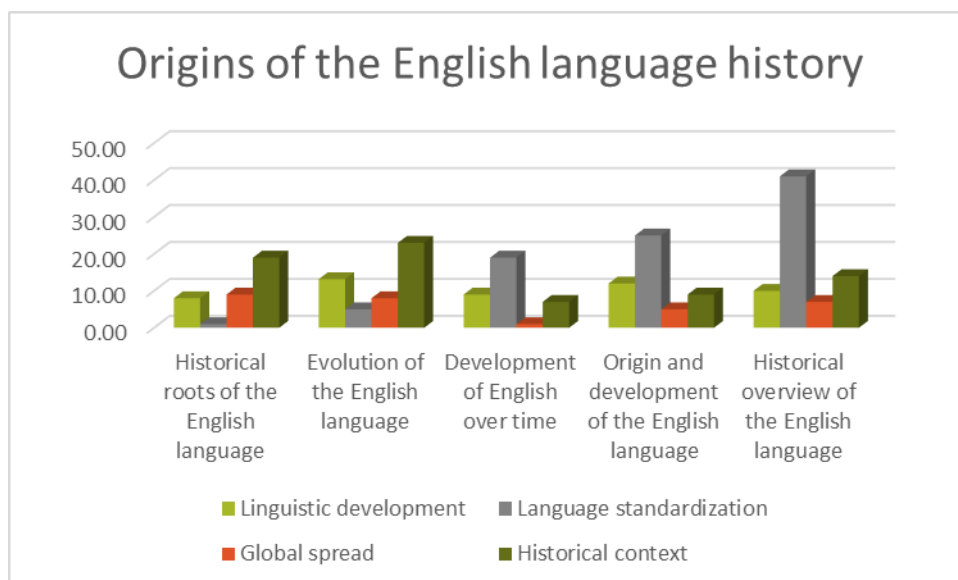


FIGURE 1. Origins of the English language history

Figure 1 illustrates the beginnings of the English language, focusing on four main areas: linguistic development, language standardization, global diffusion, and historical context. It shows the varying importance of each area over time, with language standardization and historical context gaining importance particularly in the later stages of English development.

TABLE 2. Normalized Data

	Linguistic development	Language standardization	Global spread	Historical context
Historical roots of the English language	0.0000	0.0000	0.0000	0.2500
Evolution of the English language	1.0000	0.1000	0.1250	0.0000
Development of English over time	0.1934	0.4500	1.0000	1.0000
Origin and development of the English language	0.7737	0.6000	0.5000	0.8750
Historical overview of the English language	0.3868	1.0000	0.2500	0.5625

Table 2 presents normalized data on the historical development of the English language, emphasizing linguistic development, language standardization, global diffusion, and historical context. The data show that the historical

roots of the language have a strong influence on its historical context, but have had minimal impact on other areas. As the language evolved, linguistic development gradually became more important, with the development of English over time highlighting a peak in global diffusion and historical context. The origin and development stage reflect a balance across all areas, while the historical perspective suggests a greater emphasis on language standardization and a focus on certain historical contexts.

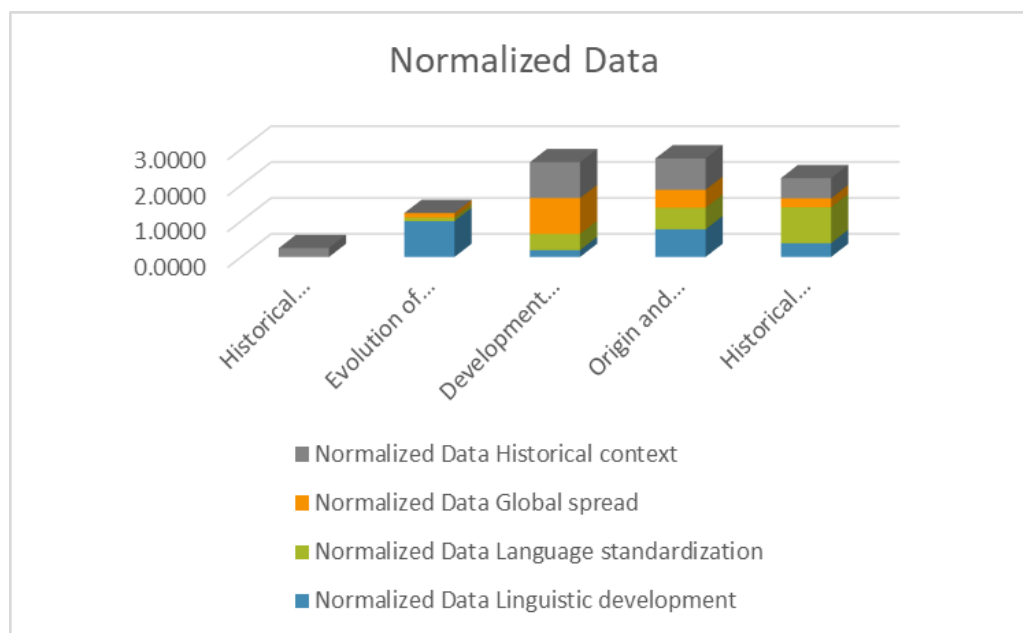


FIGURE 2. Normalized data

Figure 2 illustrates the normalized data on the main Features of the history of the English language. It reveals that historical roots have a greater influence on the historical context, while evolutionary and developmental stages show a growing importance in linguistic development and historical context. Language standardization is very important from a historical perspective.

TABLE 3. Deviation sequence

	Linguistic development	Language standardization	Global spread	Historical context
Historical roots of the English language	1.0000	1.0000	1.0000	0.7500
Evolution of the English language	0.0000	0.9000	0.8750	1.0000
Development of English over time	0.8066	0.5500	0.0000	0.0000
Origin and development of the English language	0.2263	0.4000	0.5000	0.1250
Historical overview of the English language	0.6132	0.0000	0.7500	0.4375

Table 3 presents the order of deviation for various aspects progress in English language assessed in terms of linguistic development and language standardization, global diffusion, and historical context. With particular emphasis on global diffusion, the data show that the historical roots of English have a very high degree of uniformity across all regions. The evolutionary stage reflects strong consistency in language standardization and global diffusion, while the development of English over time shows significant deviation, especially in historical context. The origin and development stage shows a very even distribution, while the historical perspective indicates considerable variation in language standardization and global diffusion.

TABLE 4. Grey Relation Coefficient

	Linguistic development	Language standardization	Global spread	Historical context
Historical roots of the English language	0.3333	0.3333	0.3333	0.4000
Evolution of the English language	1.0000	0.3571	0.3636	0.3333
Development of English over time	0.3827	0.4762	1.0000	1.0000
Origin and development of the English language	0.6884	0.5556	0.5000	0.8000
Historical overview of the English language	0.4492	1.0000	0.4000	0.5333

Table 4 presents the Grey relationship coefficient (GRA) for the historical development of the English language in four main aspects: linguistic development, language standardization, global diffusion, and historical context. The historical roots of English show an equal influence in all areas, with little emphasis on historical context. The evolutionary stage shows a strong relationship with linguistic development, but a moderate impact in other areas. The development of English over time highlights global diffusion and historical context with the highest coefficients, indicating their significant influence. The origin and development stage show a balanced influence, while the historical perspective is strongly linked to language standardization.

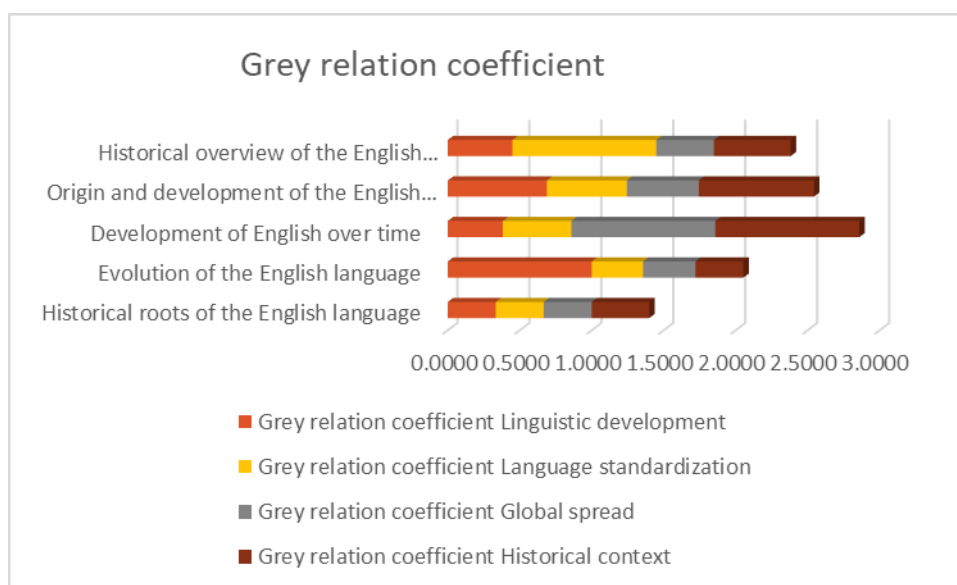


FIGURE 3. Grey relation coefficient

Figure 3 illustrates the Grey Relationship Coefficient (GRA) for the stages of English language development. It shows that historical roots have a balanced influence across all areas, with a slightly greater emphasis on historical context. The evolutionary development phase is most strongly associated with linguistic development, while the development of English emphasizes global diffusion and historical context. The origin and development stage categories exhibit a moderate balance, and the historical perspective is particularly tied to language standardization.

TABLE 5. Result of final GRG Rank

	GRG	Rank
Historical roots of the English language	0.3500	5
Evolution of the English language	0.5135	4
Development of English over time	0.7147	1
Origin and development of the English language	0.6360	2
Historical overview of the English language	0.5956	3

Table 5 presents the final Grey Relationship Grade (GRG) results showing the ranking of the various stages On the development of the English language. “The development of English over time” ranks highest with a GRG of 0.7147, indicating its significant influence in various areas. “The origin and development of the English language” follows with a GRG of 0.6360, reflecting its strong contribution. “Historical overview of the English language” ranks third with a GRG of 0.5956, while “Evolution of the English language” ranks fourth with a GRG of 0.5135. “Historical roots” has the lowest ranking at 5th place, with a GRG of 0.3500.

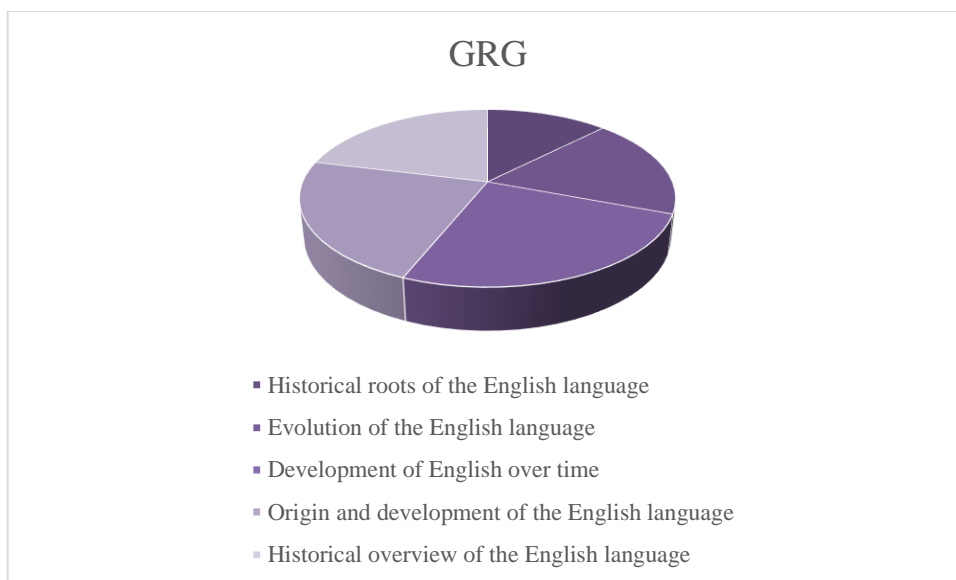


FIGURE 4. GRG

Figure 4 shows the Grey Relation Grade (GRG) values for different stages of the evolution of the English language. "The progress of English over time" is at the top with the largest GRG 0.7147, indicating its significant overall impact. “The origin and development of the English language” follows closely with a GRG of 0.6360. “Historical overview of the English language” is in third place with a GRG of 0.5956. “The evolution of the English language” has a moderate GRG of 0.5135, while “Historical roots of the English language” has the lowest GRG of 0.3500, reflecting its relatively low influence.



FIGURE 5. Shown the Rank

Figure 5 shows the ranking of various stages in the historical development of the English language, based on this Grey Relation Analysis (GRA) method. "The development of English over time" is in the highest position, occupying the first place, which indicates its most significant influence. "The origin and development of the English language" is in the second place, while "Historical overview of the English language" is in the third place. "The evolution of the English language" is in the fourth place, which reflects a moderate level of influence. "The historical roots of the English language" is in the lowest position, occupying the fifth place, which indicates a relatively small impact on the analysis.

4. CONCLUSION

Throughout history, the English language has undergone a remarkable journey of evolution and change, emerging from its Germanic roots to become a global lingua franca. This development can be traced through several major historical phases, beginning with the arrival of the Anglo-Saxon tribes in Britain in the 5th century AD, continuing through the Norman Conquest of 1066, and continuing into the modern era of globalization. The evolution of the language has been shaped by a variety of influences, including Latin, French, Dutch, and many other languages, which make it uniquely adaptable and adaptable to change. The standardization of English has had a significant impact on its development, including the creation of grammars, spelling guides, and dictionaries, which have helped to establish consistency in communication across different regions and contexts. The global spread of English has been particularly significant in recent decades, driven by factors such as international trade, technological advancement, and cultural exchange. This widespread adoption has led to interesting questions about the relationship between native and non-native speakers, with the impact of the global status of English on language proficiency and professional practices in English language teaching (ELT). Modern English has evolved into a dynamic system that is constantly changing in response to new social, economic, political, and technological developments. This adaptability is evident in the continuous emergence of new vocabulary and paradigms to meet changing communication needs. The flexibility of the language has made it particularly suitable for various specialized fields such as computer programming, international business, and higher education. The historical development of English demonstrates that languages are not static entities, but living systems that are constantly evolving through cultural exchange and social interaction. This evolution is shaped by a variety of factors, including migration trends, technological advances, and evolutionary development of social needs. The study of the development of English provides valuable insights into how languages adapt and change over time, reflecting the dynamic nature of human communication. As English continues to serve as a global medium of communication, its future development will be shaped by continuous technological innovations, cultural exchanges, and evolving communication needs. The language's ability to incorporate new elements while maintaining its basic structure means that it will continue to adapt and evolve to meet changing global circumstances, while remaining an essential tool for international communication and understanding. This historical perspective on the English language not only helps us understand its current state, but also provides understanding of how languages evolve and adapt to meet the evolving needs of their speakers in an increasingly interconnected world.

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