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Понятия ТЕРМИНОЛОГИЧЕСКАЯ СИСТЕМА, ТЕРМИНОЛОГИЯ и ЛЕКСИКА в контексте исследования английского языка для специальных целей на примере архитектурного и аэрокосмического дискурсов

Урюпина А. Д., Корзин А. С.

Аннотация. Цель исследования заключается в выявлении различий и уточнении границ между понятиями «терминология», «терминологическая система» и «лексика» в контексте научной парадигмы языков для специальных целей (ЯСП), что позволяет повысить точность понятийного аппарата при описании профессиональных дискурсов. Научная новизна работы заключается в том, что впервые проведено сопоставительное концептуальное и терминологическое моделирование указанных понятий на примере двух профессиональных сфер – архитектуры и аэрокосмической отрасли, с привлечением теоретических и прикладных источников. Особое внимание уделено выявлению причин смешения терминов в лингвистической литературе и практике, а также предложению четких определений и границ их употребления. Полученные результаты показали, что в обоих анализируемых дискурсах понятие «терминология» чаще отождествляется с набором специальных лексем, тогда как «лексика» приобретает метафорическое и лингводидактическое значения, а «терминологическая система» актуализируется преимущественно в стандартизированных областях (например, в англоязычном аэрокосмическом дискурсе), где необходима или уже существует формализованная иерархия терминов. В англоязычном архитектурном дискурсе наблюдается более гибкое и семиотически насыщенное употребление терминов. Таким образом, работа демонстрирует необходимость разграничения понятий в исследованиях ЯСП и подчеркивает значимость терминологической строгости в научной коммуникации.

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The concepts of TERMINOLOGICAL SYSTEM, TERMINOLOGY and VOCABULARY in the context of research into English for Specific Purposes in architecture and aerospace discourse

A. D. Uryupina, A. S. Korzin

Abstract. The research objective is to clarify and distinguish the concepts of ‘terminology’, ‘terminological system’, and ‘vocabulary’ within the framework of Language for Specific Purposes (LSP) to enhance conceptual precision in the description of professional discourse. The scientific novelty of this study lies in the comparative conceptual analysis of these terms within two distinct professional fields, architecture and aerospace, which has not been previously undertaken within this methodological and thematic scope. Drawing on theoretical models and field-specific linguistic data, this study identifies how terminological ambiguity arises and how these concepts are inconsistently used in academic and applied contexts. The results showed that ‘terminology’ is often equated with a general set of specialised words, whereas ‘vocabulary’ is interpreted more broadly, including metaphorical or instructional usage. Meanwhile, the term ‘terminological system’ is predominantly applied in highly standardised domains, such as aerospace discourse in English, where structured hierarchical terminology is necessary or has already been established. In contrast, the architectural domain discourse demonstrates a more diffuse and semiotically diverse use of specialised language. This paper highlights the need for clearer definitional boundaries between these key terms in LSP research and affirms the importance of conceptual rigor in linguistic and terminological studies.

Introduction

In modern linguistics, the concepts of ‘terminology’, ‘terminological system’, and ‘vocabulary’ are considered as key elements for understanding and systematising specialised knowledge in any field, including technical

and scientific disciplines. Although these concepts are often used interchangeably, they differ in their specific functions, which necessitates their clear distinction.

The relevance of this research is due to the increasing demand for terminological clarity and conceptual precision in the study of Languages for Specific Purposes (LSP), which has become a rapidly developing area within applied linguistics owing to the growth of professional communication and knowledge specialisation. The proliferation of interdisciplinary discourse and the intensification of globalised knowledge exchange have revealed conceptual inconsistencies in the usage of fundamental terms such as *terminology*, *terminological system*, and *vocabulary*. This issue has acquired particular importance in the context of technical and scientific domains, where language precision is essential for effective communication. Despite ongoing scholarly interest, the boundaries between these concepts remain blurred, resulting in ambiguity in both linguistic theory and didactic practice. Therefore, there is a pressing need to clarify the interrelation of these key concepts within LSP research.

The following objectives were formulated to achieve this goal:

- 1) to provide clear literature-based definitions of the terms in question and identify their principal distinctions;
- 2) to determine how these concepts interact and overlap in both theoretical models and real-world applications;
- 3) to compare the implementation of these concepts in two contrasting LSP domains: English architecture and aerospace professional discourses;
- 4) to evaluate the impact of terminological inconsistencies on the perception and structuring of specialised knowledge.

The research methods were determined according to the objectives of this study. A descriptive-analytical method was used to define and compare the key concepts in the theoretical literature. A conceptual analysis was conducted to examine the semantic structure and typological characteristics of each term. A comparative approach is applied to contrast the functioning of these concepts in aerospace and architectural discourse to highlight the differences. Finally, a contextual method was employed to trace the terminological behaviour in real academic and professional texts.

A rigorous analysis of terminology within the framework of LSP requires not only theoretical reflection but also an empirical foundation grounded in domain-specific sources. To examine the actual usage, overlap, and differentiation of the concepts of *terminology*, *terminological system*, and *vocabulary*, this study draws upon reference materials and terminological resources from two contrasting professional fields in English language: aerospace and architecture. These fields were selected because of their differing degrees of standardisation, lexical diversity, and disciplinary specificity.

The materials used in this study include authoritative dictionaries and glossaries of the English architectural and aerospace terms (Cowan, Smith, 2005; Davies, Jokiniemi, 2008; Glossary of Aerospace Terms; Yoshimitsu, McKenna-Lawlor, Candel et al., 2015).

The theoretical framework of this study draws on the works of V. P. Danilenko (Даниленко, 1976), L. I. Skvortsov (Даниленко, Скворцов, 1981), B. N. Golovin, R. Y. Kobrin (Головин, Кобрин, 1987), and M. N. Volodina (Володина, 1997), who describe terminology as a structured system of knowledge representation. Simultaneously, this study engages with the views of K. Y. Averbukh (Авербух, 2005), A. Trifonov, A. Shehzad, F. Mukasheva et al. (2024), and M. V. Faibushesky (Файбушевский, 2021), who pointed out the lack of terminological consensus and the multifunctionality of terms across disciplines. Studies on LSP by scholars such as J. Trace, T. Hudson, J. Brown (2015), V. P. Korovushkin (Коровушкин, 2005), and D. S. Sadirova, M. X. Berdiyeva (2023) are also considered, contributing to the sociolinguistic and cognitive understanding of specialised communication.

The practical significance of this study lies in its applicability to LSP pedagogy, terminology management and scientific writing. The results may be used in higher education for the development of courses in terminology, professional English, and academic discourse. They may also contribute to the design of multilingual thesauri, specialised dictionaries, and standardisation guidelines for professional communication.

Discussion and results

The distinction between specialised terminology and general vocabulary is frequently indistinct. In contemporary discourse, numerous technical terms transition into everyday language, occasionally losing the precision of their original definitions. For instance, terms such as 'algorithm' and 'sustainability' were once restricted to technical contexts but have now become prevalent in general discourse, often employed imprecisely (Khakimjonova, 2025, p. 55).

A wide range of researchers such as V. P. Danilenko and L. I. Skvortsov (Даниленко, Скворцов, 1981), B. N. Golovin and R. Y. Kobrin (Головин, Кобрин, 1987), M. N. Volodina (Володина, 1997) define the terms *terminology* (in the sense of 'terminological field') and *terminological system* as identical, arguing that arbitrary compilations of terms lacking a coherent, systematic connection and organisation are improbable. According to M. N. Volodina, "terminology of a particular scientific field is not just a set (list) of terms, but a semiological system, i.e. the expression of a certain system of concepts, in turn, reflecting a certain scientific worldview" (Володина, 1997, p. 30). If we accept the assertion that the terminology ('terminological field') employed in a given field constitutes a cohesive whole, consisting exclusively of terms, then it would be difficult to find grounds for disagreement with this statement. However, it should also be noted that the composition of any field is not so homogeneous.

Conversely, numerous scholars, including K. Y. Averbukh (Авербух, 2005), underscored the paradoxical nature of the field of terminological studies. First, the definitions of the basic concepts of terminology, term, and terminological

systems are unclear. Thus, the concepts of ‘terminological system’ (a system of terms consciously constructed by specialists) and ‘terminology’ (a spontaneously formed set of terms) are sometimes fundamentally differentiated.

M. T. Cabré (1999, p. 25-26) describes terminologies as “codified lexical systems” aimed at eliminating ambiguity in specialised communication. Terms are deliberately engineered for unambiguous reference, often sanctioned by experts or standards and recorded in glossaries and technical dictionaries (Khakimjonova, 2025, p. 55).

The absence of a universally accepted definition of a term can be attributed to the fact that a term is an object not only of terminology but also of several other sciences. Each discipline attempts to provide its own definition, reflecting certain features that are important from its perspective. A linguistic definition of a term considers its linguistic aspects, whereas a logical definition defines its logical aspects. In this regard, many studies provide several definitions of a term and emphasise the impossibility of creating a universal definition (Файбушевский, 2021, p. 18).

The evolution of ‘term’ in terminology, analysed through 34 definitions (1977-2019), shows a shift from formal to systemic-functional interpretations: in the 1970s-1980s, emphasis was on formal aspects – “a word/phrase from a specialised field requiring definition” (Даниленко, 1977, p. 15), focusing on professional context; in the 1990s, definitions emphasised systematicity through “nominative lexical unit” (Гринев-Гриневич, 2008, p. 30) and concept connection within subject areas; in the 2000s, cognitive linguistics influenced interpretations of terms as “verbalised thinking” (Капавайская, 2015, p. 136) or “dynamic phenomenon” (Лейчик, 2007, p. 21), though these faced criticism. By the 2010s, the ISO 1087:2019 standard defined term as “a designation representing a general concept in subject area language”, emphasizing universality and unambiguity. This evolution culminated in the authors’ definition: “a special lexeme denoting a general concept”, synthesizing historical development (Гринев-Гриневич, Сорокина, Молчанова, 2022, p. 723).

Terminology plays a crucial role in facilitating clear communication and minimising ambiguity, especially in specialised fields (Trifonov, Shehzad, Mukasheva et al., 2024). However, the application of terminology across related fields can lead to confusion because of the lack of consensus on specific definitions and classifications. For instance, in materials science, the term ‘pore’ is linked to IUPAC nomenclature, but its application in 3D bioprinting can cause misunderstandings (Trifonov, Shehzad, Mukasheva et al., 2024).

Some believe that each field of knowledge has its own terminological system, with terms serving as precise descriptors for specialised concepts. These terms are categorised into general scientific terms (used across multiple disciplines, e.g. *experiment*, *hypothetical*) and special terms (specific to particular fields, e.g. *predicate* in linguistics or *cardiology* in medicine). Together, they form the foundational vocabulary of scientific and technical communication (Mustaeva, Saidivalieva, Ataeva, 2022, p. 3).

Amidst such controversies, there is growing interest in the study of LSP within the field of linguistics. LSP incorporates both linguistics and content-area knowledge specific to a particular context based on learners’ needs (Trace, Hudson, Brown, 2015, p. 3). LSP constitutes a distinct linguistic form governed by its own sociolinguistic principles, incorporating phonetic, grammatical, and lexical elements of language. It is characterised by linguistic features that facilitate communication in specialised, corporate, and professional contexts within a given society (Коровушкин, 2005, p. 12). The emergence of LSP is closely related to the specialisation of scientific knowledge (Sadirova, Berdiyorova, 2023, p. 45). The rapid development of modern society, scientific and technological progress, and the increasing demand for intercultural communication in specialised fields require more research in LSP. The use of terminology or specialised vocabulary is a fundamental aspect of LSP (Galova, Klimentova, Moravcova, 2021, p. 23).

Within LSP, it is especially imperative to address the ongoing debate among linguists regarding the distinction between the concepts of ‘terminology’, ‘terminological system’, and ‘vocabulary’.

These two fields (aerospace and architecture) offer an interesting contrast to each other. Aerospace engineering is a highly technical domain with a strong tradition of standardisation and formal terminology management (including the extensive use of acronyms and codified definitions). In contrast, architecture encompasses not only the technical aspects of building science but also artistic and historical dimensions, resulting in a rich *architectural vocabulary* that is somewhat less formally standardised and often intertwined with general language.

Some experts (R. Y. Kobrin and L. A. Pekarskaya, V. M. Leitchik, Y. V. Borchwald, K. Y. Averbukh, N. V. Serbinovskaya, etc.) believe that ‘terminology’ is simply a collection of terms with a nominative function, while a ‘terminological system’ is an evolving set of terms designed for communication, rooted in a scientific theory. They consider that a terminological system is deliberately constructed by organising terminology into a structured array of terms, complete with their interrelationships documented in industry dictionaries and classification models.

As N. V. Serbinovskaya notes that terminology is spontaneously formed from units of terminological nomination, which include terms as well as nomens, preterms, quasi-terms, and professionalism (Сербиновская, 2009, p. 19). V. M. Leitchik highlights that a terminological system is consciously constructed as a set of terms that fulfil linguistic, logical and terminological requirements (Лейчик, 2000, p. 54).

Hence, the transition from terminology to a terminological system requires systematisation and analysis, by which terminology deficiencies are identified and methods for their elimination are determined. The terminology is then normalised, thus transforming it into a terminological system. Thus, normative work is an important tool for transforming terminology into a terminological system. The normative aspect is important not only for the formation of a terminological system but also for mastering the terminology of a particular field of knowledge.

Terms are defined as single or compound words, collocations, acronyms, abbreviations, symbols, and similar elements that are specific to a particular field or discipline, serving to denote specific concepts (Gatev, 2024, p. 265). Classical terminologists such as E. Wüster emphasised that an important goal of terminology work is to organise terms into concept systems, where each term has a well-defined place in a hierarchy or network of concepts (Trojar, 2017, p. 60).

A terminological system thus implies a level of *order and relation*: terms are not just listed but are interlinked through concept relations (hierarchies, part-whole relations, etc.). This concept is closely related to what some studies refer to as the *concept system* or *ontology* of a domain. For example, **ISO 1087** (a standard for terminology work) defines a *terminology* as a set of terms representing the system of concepts of a particular field, essentially acknowledging that behind a list of terms lies an underlying concept system (ISO 1087-1:2000: §3.2.4).

ISO 704:2009, the International Standard titled *Terminology Work – Principles and Methods*, recommends terms to be organised into coherent concept systems, ensuring that each term has a clear inferable meaning, is attributed unambiguously to a single concept (monosemy), and fits systematically within hierarchical or networked concept relationships. The standard also advises that term formation should favour productive, derivational processes, facilitating the consistent creation of related terms, and emphasises linguistic economy: terms ought to be as concise as possible while retaining clarity.

Some other researchers (V. P. Danilenko and L. I. Skvortsov, F. M. Berezin and B. N. Golovin, M. V. Noskova, A. V. Barandeev, M. N. Volodina) argue that terminology also possesses systematic organization, evidenced by relationships such as synonymy, antonymy, and generic connections. The lack of a clear distinction between these concepts is partly due to the absence of a universally accepted definition of the terminological system that distinguishes it definitively from terminology.

For example, B. N. Golovin states that “terminology is systemic, first of all, because the world, the separate sides and parts of which terminology reflects and serves, is systemic” (Головин, Кобрин, 1987, p. 43).

The concepts of terminological systems, terminology, and vocabulary are interrelated, yet distinct elements within the field of linguistics and specialised communication. Understanding their correlation involves examining their definitions, functions, and relationships within the language systems.

In the present study, the concepts of ‘terminology’, ‘terminological system’, and ‘vocabulary’ are not identified as identical and were clearly distinguished.

Vocabulary generally refers to a complete set of words that are known and used by individuals or groups. In a specialised context, it can denote a collection of terms that may include definitions and is often used interchangeably with terminology when discussing specific subject areas.

Terminology refers to the set of terms used within a specific domain, encompassing words or phrases that represent particular concepts in fields such as science, technology, or any specialised area. It serves as a structured lexicon that facilitates precise communication among professionals in these fields.

A *terminological system* is a structured framework that organises terminology based on the relationships between concepts. It includes terms, definitions, and interrelations, forming a cohesive network that aids in understanding and categorising knowledge within a discipline. This system is crucial for ensuring clarity and consistency in communication, particularly in technical fields.

In contrast to terminology, a terminological system is developed by experts in the field through the deliberate selection and, in some instances, the creation of specific words and term combinations. Additionally, it may incorporate terms borrowed from other languages to articulate the theoretical framework of the subject area (Shavkatovich, 2022, p. 843).

I. I. Galankina, N. V. Perfilieva, and O. V. Tsibizova provide an example of the complex relationship between terminology, terminological systems, and general vocabulary in their study of hydraulic engineering terminology. This analysis exemplifies the semantic ambiguity between terminology, a broader terminological system, and the general vocabulary. The study shows that terms function within scientific disciplines while retaining links to general literary language and regional dialects. This dual nature reflects the fluid boundaries between specialised and non-specialised language domains (Галанкина, Перфильева, Цибизова, 2022, p. 732).

V. Borchwald points out that ‘for the formation of a terminological system, a sufficiently high level of development of science, technology, production technologies is required, scientific, educational, reference literature, institutions for the transfer of scientific knowledge and experience’ (Борхвальд, 2000, p. 81).

It is worth considering another point of view expressed by V. A. Tatarinov. It represents the terminological system as an interconnected ‘set’ of special nominations of all types, including industry terms, as well as nomenclature signs, terminonyms (proper names performing terminological functions), professionalisms (‘plain terms’), and termoids (term-like lexical units, the status of which is not clearly defined, since they are not single-order linguistic units like a term) (Татарinov, 1996, p. 260-266).

In our opinion, the most appropriate position was formulated by R. Y. Kobrin and complemented later by K. Y. Averbukh. According to the researchers, “a terminological system is a set of terms that exists as a result of unification and normalisation, possessing systemic properties” (Авербух, 2005, p. 126).

The following investigation will explore the interrelation and ambiguity of the concepts of ‘terminological system’, ‘terminology’, and ‘vocabulary’ in more detail, using the example of architectural and aerospace discourses.

Architecture

Architecture, as a discipline encompassing the design, construction, and theory of built environments, relies heavily on precise linguistic tools to articulate complex spatial, structural, and conceptual phenomena. Its linguistic landscape spans both technical and aesthetic registers, which has direct implications for how terminology is structured and used in both professional and academic settings.

The following sections address key aspects of terminological systems. These include the standardisation process, the difference between ‘terminology’ and ‘vocabulary’, and the primary characteristics of such systems.

Standardisation Efforts. Unlike domains such as aerospace and medicine, architecture lacks a universally standardised terminological framework maintained by a single authoritative body. However, professional organisations such as the Royal Institute of British Architects (RIBA Plan of Work), the American Institute of Architects (AIA Architect's Handbook of Professional Practice), and the International Organization for Standardization (ISO 6707-1 defines fundamental terms used in architecture and construction) publish glossaries, practice manuals, and classification systems (e.g. Uniclass 2015 or MasterFormat), which function as partial terminological systems. Within architectural documentation, especially in technical drawings, building specifications, and academic curricula, the term 'terminology' typically refers to specialised and semi-standardised sets of terms that describe elements (e.g. 'clerestory', 'cantilever', 'colonnade'), processes ('site analysis', 'load-bearing calculation'), or typologies ('Gothic cathedral', 'Brutalist complex') (Cowan, Smith, 2005). These groupings reflect an underlying conceptual organisation and are often tied to ontological or taxonomic hierarchies – for example, 'building' → 'façade' → 'fenestration' → 'window' (Davies, Jokiniemi, 2008).

Use of 'Terminology' vs 'Vocabulary'. In architectural discourse, the use of 'terminology' is most prevalent in scholarly, regulatory, and design communication contexts. Textbooks, design standards, and peer-reviewed articles frequently refer to 'architectural terminology' when discussing domain-specific conceptual frameworks. In contrast, the term 'vocabulary' appears more often in metaphorical or pedagogical contexts. A design instructor may speak of a student's 'architectural vocabulary' to refer to their stylistic repertoire or formal language (e.g. 'repeated use of curves', 'light wells', or 'piloti'). In such cases, 'vocabulary' denotes not only the lexical content but also the expressive capacity of design decisions.

Terminological System Characteristics. The relationship among terms, objects, and concepts is a fundamental aspect of any terminological system. Objects refer to specific things or phenomena, such as 'building', 'roof', 'skyscraper', and 'exterior', which can be observed or measured. Concepts are formed based on the characteristics of these objects and are abstract units that allow us to classify and organise knowledge. For example, material ('brick', 'concrete'), size ('five-story'), and function ('residential', 'commercial') describe the concept of a 'building'. However, concepts can be labelled differently because there are many languages from which terms can be drawn, and one language can use many different terms to describe the same concept.

Architecture presents a fragmented yet conceptually rich and complex terminological system. Its terminology tends to be both diachronic, rooted in historical styles and practices, and synchronic, adapting to technological innovations and interdisciplinary borrowings (e.g. from civil engineering, sustainability, or design). Within this system, one may observe partial hierarchies and taxonomies, for instance,

materials → *types of stone* → *granite, marble, limestone*;

structural components → *column* → *capital* → *Corinthian, Doric, and Ionic* (Davies, Jokiniemi, 2008).

This layered organisation, although less rigorously codified than in aerospace, nevertheless reveals systemic properties. Furthermore, the use of metaphor and cultural referents (e.g. 'transparent architecture', 'machine aesthetic') introduces semantic fluidity that challenges strict standardisation, but enriches interpretive depth.

A noteworthy aspect is the coexistence of descriptive and normative uses of terms; some are codified in building codes (e.g. 'egress stair', 'fire-resistance rating'), while others are debated in theoretical contexts (e.g. 'authenticity', 'vernacular'). Thus, the architectural terminological system is both professional and interpretive, blending technical precision and conceptual ambiguity.

Aerospace

The aerospace sector (encompassing aeronautical and astronautical engineering, aviation, and so on) is known for its rigorous terminology. Several features were observed in this study.

Standardisation Efforts. Aerospace is replete with formal terminology standards, and organisations such as the International Organization for Standardisation (ISO) have subcommittees specifically for aerospace terminology (e.g. ISO/TC 20/SC 8 focuses on standardising the terms used in the aerospace industry). Industry bodies such as SAE International also publish aerospace standards containing glossaries of terms. As a result, when aerospace professionals refer to 'terminology', they often mean a vetted, agreed-upon set of terms. For example, the term '*angle of attack*' has an exact definition in aerospace terminology (the acute angle between the chord of an airfoil and the line of relative air flow (Collins English Dictionary)). These definitions are maintained in the authoritative references. The existence of official glossaries and term databases (such as NASA's terminology databases or military aerospace term catalogues) means that aerospace *terminology* is relatively coherent and accessible to translators. We might say that the aerospace field possesses multiple *terminological systems*, for instance, both the classification of aircraft parts and the taxonomy of flight dynamics concepts refer to a terminological system, each reflecting the conceptual structures taught in aerospace engineering.

Use of 'Terminology' vs 'Vocabulary'. In aerospace context, the word terminology is prevalent, particularly in technical documentation and training materials. One reason is the high importance of precise communication for safety; thus, emphasis is placed on using the correct terminology. Misunderstanding a term in aerospace can have serious consequences, therefore, there is a culture of attention to terminological details in this field. 'Vocabulary' is also used, but often when addressing a less technical audience. For example, an educational program might introduce 'basic aerospace vocabulary' to students; here, 'vocabulary' signals a simpler, introductory collection of words (perhaps mixing general and specific terms). In research papers or engineering specifications, one is more likely to find sentences such as "The following terms are defined for clarity of terminology" rather than referring to them as 'vocabulary'. Our qualitative review found that aerospace authors seldom discuss 'aerospace vocabulary' in academic

writing; they talk about ‘terminology’ or just use the term itself and assume readers know it is domain-specific (Yoshimitsu, McKenna-Lawlor, Candel et al., 2015; Skinner, Oltrogge, Strah et al., 2022). This culture of attention suggests that, within the field, ‘terminology’ carries the necessary weight of precision, whereas ‘vocabulary’ might be reserved for didactic contexts or when discussing language learning.

Terminological System Characteristics. Aerospace terminology tends to exhibit the hallmarks of terminological systems: hierarchical classification (e.g. an ontology of aircraft might classify aircraft into airplanes, helicopters, etc., further into jet vs. propeller for airplanes, etc.) and completeness within subdomains (e.g. a complete list of parts of an engine). One clear example is how aerospace engineering terms often form part-whole hierarchies: the wing is part of an aircraft, which is part of aerospace vehicles, or conceptual taxonomies: types of orbits (LEO, MEO, GEO, etc.) are organised by altitude. In addition, aerospace has a high degree of *acronymy and code* usage (e.g. abbreviations such as GPS, ICAO, and APU). Although acronyms might be seen as separate phenomena, they are part of the terminology of a field. They often have official definitions that reinforce standardisation. We observed that many aerospace glossaries list acronyms alongside terms effectively as part of the domain vocabulary that must be learned by domain novices.

In summary, the aerospace field actively cultivates systematised terminology, and the community is aware of this. The concept of a ‘terminological system’ is practically realised in its classification schemes and standards, even if practitioners do not frequently use that exact phrase. ‘Vocabulary’ in this field is a broader concept that might include colloquial or operational terms (for instance, pilot slang or codewords), but these are usually distinguished from formal ‘terminology’ in formal discourse.

The results of the comparison of the concepts of ‘terminological system’, ‘terminology’, and ‘vocabulary’ the context of research into Language for Specific Purposes are outlined in Table 1.

Table 1. Comparison of terminological system, terminology, and vocabulary

Feature	Terminological System	Terminology	Vocabulary
Definition	Structured network of conceptually related terms, organised in hierarchies or semantic relations – grounded in standards like ISO 704 and ISO 860.	Collective set of specialised terms specific to a domain or field, also referring to the study of these terms.	General set of words or terms – either personal (known to an individual) or language-based, not necessarily specialised.
Structure	Highly organised: includes concept systems, clear definitions, relations, hierarchies, and networks.	Often structured, but may be ad hoc or reflective of a field’s specialised labels; may show weaker explicit relations.	Typically, unstructured list; sorted alphabetically or by usage; no inherent relationships.
Complexity & Scope	Highest – spans definitions, relationships (e.g. parent/child, part/whole), concept harmonization methods.	Moderate to high – includes term meaning, usage, and sometimes inter-term relationships.	Basic – focus on form and meaning of words, excluding deeper conceptual networks.
Purpose/Use	Ensures terminological consistency, supports translation, ontology development, and systematic conceptual understanding.	Promotes domain-specific clarity, standard usage patterns, can form the basis for term management.	Supports general communication and comprehension; used in language learning, writing, reading.
Relation to ISO standards	Core to ISO 704 (‘Terminology Work – Principles & Methods’) and ISO 860 (concept/term harmonization).	Grounded in ISO 1087 fundamentals for terminology work and science.	Not standardised – no formal ISO definitions, though sometimes used in ISO ‘glossaries’ for standards.
Examples	- Controlled term databases (e.g. BIM ontologies). - ISO concept systems with defined relations. - GNOME’s translation termbase.	‘Load-bearing wall’, ‘column capital’, ‘flying buttress’ in architectural terminology. - Field-specific terms like ‘atrium’, ‘arcade’, ‘portico’ in architecture.	- Personal/common word list: ‘brick,’ ‘door,’ ‘window,’ ‘hall’. - General English vocabulary in dictionaries.

The terminological landscapes of aerospace and architecture reflect their fundamental differences, as summarised in Table 2.

Table 2. Key features of LSP in Architecture and Aerospace

Feature	Architecture	Aerospace Engineering
Standardization	Low/Fragmented: Professional guidelines (RIBA, AIA), partial standards (ISO 6707-1, Uniclass). No single authority.	High: Formal international bodies (ISO), industry standards (SAE), authoritative databases (NASA).
‘Terminology’	Prevalent: Used for domain concepts, elements, processes in scholarly, regulatory, design contexts.	Dominant & Precise: Core professional language. Safety-critical definitions. Used in specs, research.
‘Vocabulary’	Metaphorical/Pedagogical: Often describes a designer’s <i>stylistic repertoire</i> or <i>formal language</i> .	Introductory/Broad: Often implies a simpler, non-technical collection for learning/general audience.
System Structure	Partial Hierarchies: Looser taxonomies (materials, styles, components). Fragmented systems, less focus on completeness.	Rigorous Hierarchies: Explicit part-whole, conceptual taxonomies (orbits, aircraft types). Completeness sought in subdomains.
Acronyms/Code	Less Dominant/Formal: Not as central or systematically integrated.	Highly Formalised & Integrated: Essential part of the terminology (GPS, LEO, APU). Defined in standards.
Fluidity	High: Incorporates history, metaphor, cultural context, theoretical debate. Terms can be ambiguous.	Low: Precision and consistency are paramount. Terms stable, definitions fixed.
Primary Drivers	Design Expression, History/Culture, Regulation, Interdisciplinary Practice. Balances technicality with artistry/theory.	Safety, Engineering Precision, Interoperability, Regulation. Unambiguous communication essential.
Core Character	Conceptual Richness: Terms as descriptors blending technical fact with cultural/aesthetic meaning.	Engineered Precision: Terms as unambiguous tools for describing complex systems.

A comparative analysis of aerospace and architecture within the framework of LSP highlights the fundamentally different approaches to terminology. Aerospace relies on a tightly regulated linguistic system in which precision, consistency, and hierarchical structure are essential because of safety and technical demands. Terminology in this domain is clearly defined and rigorously standardised, leaving little room for ambiguity.

In contrast, architectural discourse blends technical vocabulary with expressive and metaphorical language. While it employs formal terminology in academic and regulatory contexts, it also utilises broader lexical resources to convey stylistic, historical, and conceptual nuances. The architectural lexicon is more fluid and interdisciplinary, reflecting the hybrid nature of the field, which spans both engineering and humanities.

These differences illustrate the need for a clear distinction between the concepts of 'terminology', 'terminological system', and 'vocabulary' in LSP research. The structured comparison demonstrates that while both domains use specialised language, their degree of formalisation and linguistic organisation varies significantly. This underscores the importance of a systematic and context-sensitive approach to terminological studies, particularly when analysing fields with diverse communicative practices.

Conclusion

This study has fulfilled its objective of clarifying the boundaries and distinctions between the concepts of 'terminology', 'terminological system', and 'vocabulary' within the framework of Languages for Specific Purposes. The key findings and conclusions are as follows:

1. Clear, literature-based definitions of the key terms were formulated. Terminology is defined as a set of specialised units functioning within a professional discourse, a terminological system is a hierarchically organised network of terms reflecting conceptual relations within a specific field, and vocabulary is a broader concept that includes both terms and general words used in professional contexts.

2. The analysis showed a partial overlap and semantic ambiguity between the concepts. 'Terminology' is at times equated with 'vocabulary', while 'terminological system' is seen as a consciously structured and normalised subset of terminology.

3. The comparative analysis revealed that in architectural discourse, terminology is less formalised and often enriched by cultural and interpretive layers. By contrast, the aerospace field adheres to strict standardisation, terminological precision, and structured systems.

4. Terminological inconsistency was found to hinder knowledge transfer, education, and standardisation efforts. Clarifying and differentiating these concepts enhances the conceptual apparatus and supports more accurate professional communications.

In summary, the hierarchical relationship between terminological systems, terminology, and vocabulary underscores their critical role in facilitating effective communication within specialised domains. By providing a structured conceptual framework, terminological systems support the development of standardised terminology, enhance precision, and enable coherent knowledge exchange across professional and academic contexts.

Future research may explore several promising areas. One potential direction involves expanding comparative analysis to other professional domains, such as medicine, law, and environmental science, to construct a more universal typology of terminological systems. Another important avenue is the study of the cognitive mechanisms underlying term formation and usage in various LSP contexts, which could deepen our understanding of how specialised language evolves and functions. In addition, the development of automated tools for term extraction and classification using corpus linguistics and artificial intelligence presents valuable opportunities for advancing terminology research. The creation of multilingual terminological databases that incorporate both conceptual and ontological structures is equally significant. Finally, further attention should be paid to how cultural and national factors influence the standardisation of terminology and shape the perception of terminological systems in different linguistic communities.

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Информация об авторах | Author information



Урюпина Анна Дмитриевна¹
Корзин Андрей Сергеевич²

^{1,2} Российский университет дружбы народов имени Патриса Лумумбы, г. Москва



Anna Dmitrievna Uryupina¹
Andrey Sergeevich Korzin²

^{1,2} Patrice Lumumba Peoples' Friendship University of Russia, Moscow

¹ uryupina_ad@pfur.ru, ² korzin_as@pfur.ru

Информация о статье | About this article

Дата поступления рукописи (received): 17.06.2025; опубликовано online (published online): 05.08.2025.

Ключевые слова (keywords): терминологическая система; терминология; лексика; язык для специальных целей; специализированные термины; terminological system; terminology; vocabulary; Language for Specific Purposes; domain-specific terms.