

POLYSEMY AND HOMONYMY IN AVIATION ENGLISH

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In today's world, English is not just a tool for communication and personal or professional development, it is also a critically important means of communication between specialists in various professional domains. One of the most safety-sensitive areas where English plays a decisive role is aviation, in which effective communication directly affects flight safety. As English is the international language of aviation, any linguistic ambiguity in professional discourse may pose serious operational risks.

English, like any living language, constantly evolves and incorporates new lexical units, idioms, and terms. Aviation terminology is no exception: some terms acquire additional meanings, while others undergo semantic shifts due to technological progress and changes in operational procedures. Such processes may cause communication difficulties between pilots and air traffic controllers, especially in time-critical or stressful situations. Therefore, the issue of semantic ambiguity in aviation terminology remains highly relevant.

This study aims to examine the impact of polysemy and homonymy on English aviation terminology and to determine their potential influence on professional communication in aviation. To achieve this aim, the research objectives include analyzing the semantic features of polysemous and homonymous units in aviation discourse, identifying the primary sources of semantic ambiguity in pilot-controller communication, and assessing the risks of misinterpreting aviation terms.

The research is based on the analysis of authentic aviation documentation, ICAO standardized phraseology, aviation accident reports, and terminological dictionaries. The methodological framework includes semantic analysis, contextual analysis, and descriptive linguistic methods, enabling the identification of patterns of meaning variation, functional overlap between general and specialized vocabulary, and potential zones of communicative interference.

Polysemy is a phenomenon in which a single word possesses multiple meanings. A characteristic feature of the polysemy of a word is its ability to correlate with several concepts simultaneously. For example, the word "run" can be used in meaning «бігти», «керувати» (business or process), «балотуватися». Polysemantic terms in the aviation terminology system are about 8% of the total number of terminological units. It is characteristic mainly of positive terms and complex terminological units [1, p. 12].

Aviation terminology is often based on various technical features, so it is necessary to understand technical factors, the construction of aviation equipment, aircraft models, etc. After all, technical differences determine differences in the meanings of terms, which will require a high level of professional training from all participants in aviation communication [5, p. 9].

In aviation, common words require highly specialized meaning. However, the problem of polysemy arises when a pilot or flight controller mistakenly uses a commonly understood meaning rather than a strictly defined term. For instance, during a go-around procedure, the expression “take-off power”, which has the meaning «злітна потужність», can be misinterpreted as «зменшити потужність» [2, p. 29]. Because of it, aviation communication avoids using the verb “take” in the meaning «брати, прибирати» to prevent any association with the term “take off”. Instead, for the “take off” pilot uses the expression “set take off thrust”.

Unfortunately, in aviation history, there have been accidents caused by fatal mistakes arising from the ambiguity of the word. One such situation is the disaster on the island of Tenerife in 1977, which was caused by the phrase “at take off”. At that time, the pilot used this phrase to initiate the movement, and the flight controller interpreted it as a point in the lane [6].

Moreover, in the globalization of air transportation, the polysemy problem is becoming more acute due to the international nature of the workforce, language barriers, and cultural differences, even though English is the lingua franca of the aviation industry. However, even in English, the same term may have different meanings. For instance, “taxi”: one meaning is the way an airplane moves along a runway; another is a vehicle for transporting passengers [5, p. 10].

Homonymy is a linguistic phenomenon in which words sound and spell the same but have entirely different meanings and are unrelated. So, in the aviation industry, homonymy can cause more interference than polysemy. After all, under stress, poor connection, and the loud engines, the pilots cannot hear what the flight controller is trying to convey at all. Homonymy has permeated the aviation terminological system’s pool of abbreviations. For example, CB (circuit breaker) – автомат захисту мережі, CB (cumulonimbus) – купчасто-дошові хмари. However, homonymous aviation abbreviations can be expressed in single characters. For instance, V (variable) – змінний, V (visibility) – видимість. Therefore, additional letters and indices are used to distinguish such homonymous symbols [3, p. 378].

Furthermore, the probability of confusion in aviation increases because of using phonetically homonymous words and words with a similar spelling. For example, cease [si:s] – перестати, seize [si:z] – схопити, заклинути [4, p. 122].

The findings of this research emphasize the importance of systematic linguistic training for aviation professionals, with a particular focus on semantic precision and terminological awareness. The results demonstrate that although polysemous and homonymous units constitute a relatively small segment of aviation terminology, their communicative impact is disproportionately high, especially in safety-critical situations.

In conclusion, effective aviation communication requires a high level of terminological awareness alongside technical competence. Even minor inaccuracies in the use or interpretation of aviation terms may lead to serious consequences. Further research prospects include developing targeted training modules on semantic ambiguity for pilots and air traffic controllers, as well as a comparative analysis of polysemy and homonymy in aviation discourse

across different linguistic and cultural contexts. Such studies may improve international aviation communication standards and minimize human-factor risks.

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