The abstract plays a crucial role in academic writing, providing a concise summary of the content. To improve the writing quality of graduate English academic writing courses, this study conducted a double contrastive analysis between translated English abstracts (Ta) and native English abstracts (Ea), as well as between Ta and original Chinese abstracts (Ca). This study covers data from 20 different fields, including theoretical and applied natural sciences, social sciences, medicine, and economics, to ensure extensive evaluation. The analysis examined the frequency of paragraphs in each section (introduction, methods, results, and conclusion) and language features such as verb tense, passive voice, and other grammatical differences. The research results can be summarized in three key points. Firstly, compared to English authors, Chinese authors tend to include more content in the introduction section. Secondly, there are significant differences in the use of verb tenses, with Chinese authors showing a limited understanding of the subtle meanings and functions of different tenses. Thirdly, native English abstracts, especially in the section of Introduction, use more passive voice compared to translated English abstracts. These differences are attributed to the influence of the authors' native language (Chinese) and their lack of experience in English academic writing. The study concludes that Chinese authors need a deeper understanding of the nuanced differences in English writing and the structural differences between the two languages. The research findings highlight the need for targeted training and course materials to help Chinese graduate students improve their English academic writing skills. By addressing these differences, educators can better prepare students for successful academic communication in English.