摘要

英语是当今国际学术界所通用的媒介语言，其重要性可见一斑。强调学术英语写作的作用对中国学术成果走向世界、提升中国研究者的国际学术影响力具有重要的意义。研究生群体是各个学科专业的后备学术人才力量，培养他们的英语学术写作能力对提高我国未来科研人员的学术能力十分有益。因此，研究提高英语学术写作能力的教学方法具有重要的应用价值和战略意义。目前，我国研究生与母语者的英语学术写作的差距表现在哪些方面是我国英语教学界普遍关心的问题之一。

目前不少研究显示，进入高级英语学习阶段后，中国英语学习者缺乏专业的学术英语写作训练，语域意识较薄弱，表现之一是书面语体中出现大量的口语化和非正式性特征。这些研究虽然揭示了英语学习者学术英语写作在语体上的倾向性，但仍有待进一步深入：学习者和母语者学术语体上的差异究竟表现在哪些具体语言特征上？这些差异又该如何从总体上去把握？

本研究的主要目标有二：第一，引入 Biber (1991)中所应用的多维度分析法和统计学中的因子分析理论，分析众多语言特征在学术写作语体中的共现模式，总结出一系列用于描写学术语体特征的宏观指标，并尝试解读其背后的话语功能，以期为学习者学术英语写作提供参考；第二，分析对比学习者和母语者在各个维度上的维度分均值差异以及各维度内语言特征的频率差异，并尝试探讨背后的原因。

笔者选取了语言学专业的中国高级英语学习者与母语者的硕士毕业论文各100 篇（总计约 290 万词次）建设了两个语料库，运用 Biber (1991)创立的多维度分析方法，在综述前人研究的基础上共选取了 69 项语言特征，统计了各特征在文本中的归一化频率，观察母语者和英语学习者学术语体的微观差异。为从宏观层面把握母语者和英语学习者学术语体的差异，构建学术语体宏观特征指标体系，本研究引入了因子分析的方法，通过综合分析各项语言特征的在各个因子中的共现情况以及在具体文本中的使用情况，认为英语学习者和母语者学术语体的宏观特征的差异可以使用 4 个维度的语言特征共现模式来描述，分别

是："假设性与信息性相关语言表达"、"互动性与客观性相关语言表达"、"句法复杂度和观点突出性相关语言表达"、"即时风格与记叙风格相关语言表达"。

为了研究英语学习者和母语者在上述 4 个维度上的语言特征使用差异，本研究使用了独立样本 t 检验。结果表明，英语学习者学术语体的特点是，强调客观事实之间的逻辑连接，有意识削弱作者身份的凸显度，较多使用强调词、必要情态词等语言手段突出作者观点，整体话语风格偏记叙性质。而母语者学术语体的特点是，着重构建新假设，作者在论文写作中强调自身在整个学术活动中的参与，积极与读者进行互动以说服读者接受自己的学术观点。文本中的句子和段落普遍较长，说明作者善于用复杂的语言手段来传达自己的思想，整体话语风格呈现即时性。

本研究认为，造成这种差异的深层次原因在于中西文化内部差异、中外学术英语课程设置差异等方面。为此，研究建议各高校开设专门的学术英语写作课程、注重英汉语言语体对比分析，尽量避免语言迁移的消极作用、鼓励学生模仿本领域前沿国际期刊的写作语体，着重培养英语学习者的语域意识。

关键词：多维度分析法，因子分析，学术英语写作，语域研究

Abstract

English, being the first world language, is said to be the first global lingua franca and it is the most widely used language in the international academic field. Emphasizing the role of academic English writing is of great significance for promoting Chinese academic achievements to the world and enhancing the international academic influence of Chinese academic researchers. Developing the academic English writing ability of graduate students, who are the academic reserve force of various disciplines, will certainly improve Chinese overall academic ability in the future. Therefore, research on developing teaching methods to improve English academic writing ability has both important application value and strategic significance. At present, the gap between graduate students and native speakers in English academic writing is recognized as a common concern in EAP researches in China.

At present, many existing studies show that, after entering the advanced English learning stage, it seems that Chinese English learners still lack professional academic English writing training and register awareness. For instance, their English writing is filled with colloquial and informal features. Although these studies have revealed the stylistic tendency of English learners' academic English writing, they still need to be further developed: What are the differences between learners and native speakers in terms of specific language features? How to describe these differences as a whole?

The aims of the study are thus twofold: First, take a multi-dimensional analysis approach. Based on factor analysis theory in statistics, this method helps researchers to figure out the co-occurrence pattern of numerous linguistic features in academic writing by reducing those features into several factors (also known as dimensions in terms of multi-dimensional analysis). Investigating the discourse functions of each factor, it would be much easier for English learners to thus improve their English writing quality; Second, compare the mean dimension scores and normalized frequency of language features contained in each in each dimension between English learners and native

speakers, and try to provide possible interpretation.

First, 100 master's theses of Chinese Advanced English learners from Cnki and 100 master's theses of native speakers from Proquest were randomly selected, separately. Graduates from both groups majored in Linguistics. to build two corpora after a series of careful pretreatment, two corpora were finally constructed (about 2.9 million words). Second, the multi-dimensional analysis methods initiated by Biber (1991) were adopted. After a review of previous studies on register analysis and second language writing, 69 language features were selected. The normalized frequency of each feature in the text was then computed. Differences between native speakers and English learners were observed from a microscopic scale. In order to grasp the differences between native speakers' and English learners' academic styles from a macroscopic scale, factor analysis was introduced. Through a comprehensive analysis of the co-occurrence of various language features in each factor and their use in specific texts, It is considered that the differences in the macro characteristics of academic styles between English learners and native speakers could be described in terms of four dimensions, namely: "Hypothetical and informative language expression", "Interactive and objective language expression", "Syntactic complexity and viewpoint prominence related language expression" "Immediacy and narration related language expression".

Next, to examine if second language learners and native speakers differ significantly in terms of average dimension score and the normalized frequency of each feature in each dimension, a set of independent sample t-tests were carried out. The results suggested that second language learners usually emphasize logical connections between objective facts while consciously weakening the identity of the author at the same time. They tend to highlight the author's views using various emphatics and modals signifying necessity. The overall discourse style of second language learners is narrative in nature. On the other hand, native speakers are more likely to form new hypotheses in their writing. They emphasize authors' involvement in every stage of the research process, actively interacting with readers to convince them to accept their

views. The sentences and paragraphs in the text are generally longer, which implies that they are generally good at employing complex language devices to convey thoughts. The overall discourse style of second language learners is immediate in nature.

These differences could attribute to different cultural backgrounds, academic English Curriculum settings. To this end, this study proposes that colleges and universities set up specific academic English writing courses, focusing on the comparative analysis of English and Chinese languages. Teachers should try to avoid the negative effects of native language transfer, and encourage their students to imitate the writing styles of cutting-edge international journals in different fields, thus cultivating their register awareness.

Keywords：Multi-dimensional analysis, factor analysis, English for Academic Purposes, Register studies.