

Disciplinary enculturation and authorial stance: Comparison of stance features among master's dissertations, doctoral theses, and research articles

Xuyan Qiu & Xiaohao Ma

The Open University of Hong Kong, Jilin University (China)
christyxyq@hotmail.com, xiaohao@jlu.edu.cn

Abstract

Achieving a credible and authoritative stance in academic writing requires a writer's disciplinary enculturation. While postgraduate students may have a foot in the door, expert writers have accumulated much knowledge and practice in their research fields. However, we do not yet know enough about how writers with different degrees of disciplinary enculturation produce an authorial stance in specific writing contexts. To address this gap, this study explores the use of stance features in master's dissertations, doctoral theses, and published research articles in applied linguistics. Findings show that master's students employed more hedges, boosters, and attitude markers, but fewer self-mentions than doctoral and expert writers, suggesting they were tentative in making propositions and respectful of claims in their disciplinary community. Doctoral candidates adopted similar stance expression practices as expert writers, indicating their emergent mastery of their field's rhetorical conventions. The findings contribute to understandings of writers' differences in taking authorial stance with respect to disciplinary enculturation, and suggest ways to enhance postgraduate students' stance-taking practices in academic writing.

Keywords: authorial stance, postgraduate students, thesis and dissertation, corpus.

Resumen

Enculturación disciplinar y posicionamiento del autor: comparación de los mecanismos de posicionamiento en tesis de máster, tesis doctorales y artículos de investigación

Para mostrar credibilidad y autoridad, los autores de textos académicos deben adquirir los usos y hábitos de sus respectivas disciplinas. Mientras los estudiantes de posgrado todavía están iniciándose, los investigadores experimentados ya han acumulado muchos conocimientos y práctica en sus áreas de investigación. Se sabe poco, sin embargo, sobre el modo en que los distintos grados de enculturación académica afectan al posicionamiento del autor en contextos concretos de escritura. Para averiguarlo, en el presente estudio se examinan las distintas estrategias de posicionamiento del autor utilizadas en tesis de máster y de doctorado y en artículos de investigación de expertos publicados en el campo de la lingüística aplicada. Los resultados muestran que los estudiantes de posgrado utilizan más mitigadores, intensificadores y marcadores de actitud, pero no se mencionan a sí mismos tanto como los doctorandos o los escritores expertos, lo cual indica que los estudiantes de posgrado son prudentes en sus afirmaciones y respetuosos de los preceptos de su comunidad disciplinar. En los doctorandos se aprecia una práctica similar a la de los escritores expertos a la hora de manifestar su postura, lo que indica un cierto dominio incipiente de la retórica de la disciplina. Los hallazgos de esta investigación ayudan a comprender las diferencias en la adopción de un determinado posicionamiento por parte de diversos grupos de escritores en relación con su enculturación académica e inspiran fórmulas de mejora de las prácticas habituales entre los estudiantes de posgrado.

Palabras clave: posicionamiento del autor, alumnos de posgrado, tesis y disertaciones, corpus.

1. Introduction

Recent ESP/EAP studies have shown growing interest in stance in academic writing. Underlying this trend is the recognition that writing for curriculum and publication purposes is a persuasive practice; to accomplish persuasiveness, the writer needs to assume a credible, authoritative stance appropriate to specific contexts of writing (Flowerdew, 2015; Hyland, 1999). Experienced writers are aware of the centrality of stance-taking in academic writing. Rather than merely communicating information, they evaluate content to establish authority and effect persuasion, deploying various devices to convey their attitudes and opinions (Hyland, 2005a). Accordingly, students are expected to project a critical, informed stance that aligns with disciplinary experts' discourse practices (Lancaster, 2016).

Much has been written about linguistic manifestations of stance in students' academic writing, for example, in essays, academic reports, and theses (Soler-

Monreal, 2016; Jiang & Ma, 2018). By relating the scope and patterns of stance features to students' linguistic, disciplinary, and educational backgrounds, researchers have established that appropriately signalling a stance can challenge student writers, especially those lacking linguistic resources and disciplinary writing experience. Expert writers sometimes assert stance subconsciously or through tacit choices, making it challenging for students to discern and learn such language features. Some first-year undergraduate students tend to adopt extreme generalization markers (such as *always*) to demonstrate stance (Aull et al., 2017), and final-year undergraduates often rely on a limited range of stance features infrequently used by expert writers (Hyland, 2012).

In addition to certain students' stance-taking performance, researchers have recently inquired about differences in stance-taking by students of different learning levels, or different degrees of disciplinary enculturation. Aull and Lancaster (2014) analysed stance features in writing by first- and advanced-year college students and published writers, and found increasing hedging and decreasing boosting features as writers gained more disciplinary enculturation. Kawase (2015) analysed authors' doctoral theses and later research articles and discovered that writers inserted more hedges and fewer attitude markers and self-mentions in the latter. While Kawase attributed this to genre difference, it is fair to speculate whether writers' growing expertise also influenced their use of stance resource.

While studies have examined stance features in undergraduate (Hyland, 2012; Lee & Deakin, 2016), master's (Peters, 2011), and doctoral writing (El-Dakhs, 2018), it is difficult to attain a plausible understanding of writers' development in the specific academic writing practice of stance-taking. Some studies (e.g., Koutsantoni, 2006) treat master's and doctoral students as a group with similar understandings of and performance in academic writing. However, because of the different learning purposes, inquiry modes, and learning outcomes of undergraduate, master's, and doctoral programmes, it is unconvincing to generalize findings of stance in coursework genres and master's dissertations to doctoral writing. As Samraj (2008: 65) rightly noted, master's dissertations, "produced by 'quasi' members at the end of a master's program, do not completely embody the discursive practices of the disciplines." Similarly, El-Dakhs (2018: 14-15) observed, "master's authors display less enculturation in the disciplinary community than their PhD counterparts and may thus not appropriate their practices well enough to the community's conventions."

Considering the importance of stance for success in academic writing, the lack of knowledge about stance-taking performance development, and the need to control for influences from disciplinary discourse practices, this study compares stance features in the writings of master's students, doctoral candidates, and expert scholars in applied linguistics, in specific, second or foreign language learning and teaching. Drawing on Hyland's (2005a) categorisation of stance resources in interactional metadiscourse, and Hu and Cao's (2011) study, this study explores how three writer groups at different stages of disciplinary enculturation deploy stance features in their writing. The question guiding the study is:

How do master's students, doctoral candidates, and expert writers in applied linguistics deploy stance features to project their authorial stance in their writing?

We will first discuss current conceptions of stance and review relevant literature on stance in student academic writing and applied linguistics research genres, then present the study's corpus and analytical framework, before discussing our findings.

2. Stance and student academic writing

2.1. Stance: Evaluative position and writer presence

Stance concerns the interpersonal and interactional aspects of academic writing. It signals the writer's voice or personality in the text and is influenced by disciplinary practices of academic persuasion (Hyland, 2005a). According to Gray and Biber (2012), stance conveys writers' judgement and opinion about given information, varying in its linguistic manifestation (ranging from lexical to grammatical structures) and locus of assessment (from communicating personal attitudes to commenting on the status of knowledge). It is conveyed through evaluative and self-mention language, including features of personal attitudes, beliefs, opinions, and the writer's chosen self-mention devices (Hyland, 2005a). By modulating language of evaluation and self-mention, writers turn texts into venues of negotiation with readers for credit and credibility of claims (Dressen-Hammouda, 2014).

A popular and well-tested taxonomy for analysing stance in academic writing is Hyland's (2005a) metadiscourse model, which divides metadiscourse into

interactive sources (guiding readers through texts) and interactional ones (involving readers in the argument). Drawing on this model, the current study highlights stance features categorised as interactional markers, dividing stance into hedges, boosters, attitude markers, and self-mentions (Hyland, 2005b). It understands hedges and boosters as writers' means of indexing epistemic stance, and attitude markers as annotations of writers' feelings on and attitudes towards the information. Specifically, hedges are lexical expressions of writers' caution about the reliability and plausibility of a statement (such as *perhaps*); in contrast, boosters signal writers' commitment and assertiveness about certain information (such as *definitely*). Attitude markers communicate the writer's feelings of information; they include attitude verbs (such as *prefer*), sentence adverbs (such as *essentially*), and adjectives (such as *remarkable*), all of which are lexical items of emotions, judgement, and (dis)agreement (Hyland, 2005b). Self-mention (such as *I*) is also a stance feature, because intrusion of first-person pronouns exhibits writers' rhetorical decision to assert their credibility and gain credit for their claim (Hyland, 2012).

Focusing on lexical evidence of stance manifestation, Hyland's (2005b) model has proven an efficient heuristic for identifying traces of stance in academic writing (Dahme & Sastre, 2015), particularly in the corpus-based approach taken in this study, through which researchers can consistently extract stance features in large numbers of texts. Moreover, heeding Silver's (2003) caution that analysis of stance features should examine the context of their occurrences, we consider the sentential and discoursal context of stance feature in this study.

2.2. Stance in student academic writing

Projecting a stance that is critical, considered, and aligned with disciplinary practices is crucial to students' academic writing success. College students are often required to "construct stances ... in ways that are recognized by readers as appropriate and authoritative – i.e., assertive, knowledgeable, critically distant, and aligned with a specific disciplinary culture" (Lancaster, 2014: 269-270), and may receive lower grades when their writing is regarded as lacking an analytical and evaluative stance (Soliday, 2004; Wu, 2006). Postgraduate students are also expected to project a knowledgeable and authoritative stance (Swales & Feak, 2012), which requires them to evaluate disciplinary claims and knowledge in a polite, yet contrastive manner (Hyland, 1998).

Though important, assuming an appropriate stance can be challenging. It involves “demarcating one’s views vis-à-vis others’ views, such as through particular types of proportions of hedges, boosters, contrast markers, and code glosses” (Aull & Lancaster, 2014: 174), which requires students to manage linguistic resources, pragmatic considerations, and discourse knowledge. Since students need to grapple with content knowledge and rhetorical situation simultaneously, they are often unprepared when communicating a stance with disciplinary readers or assessors (Soliday, 2004). Concerning students’ stance-taking performance in academic writing, previous studies have examined two broad questions: 1) the differences between English L1 (EL1) and L2 (EL2) students in enlisting stance features; and, 2) the differences in stance feature use by students of different levels of study.

Regarding the first question, research shows EL2 students generally underperform EL1 students in terms of the frequency and array of stance features in their writing (Lee & Deakin, 2016). EL2 students also insert strong stance features, sometimes to a disproportionate degree, to increase persuasiveness (Li & Wharton, 2012). However, L1-L2 disparity in stance-taking may decrease as L2 students’ English academic writing experience and disciplinary enculturation increase. Ryshina-Pankova (2011) compared persuasive writings by L2 students of different levels and found students were increasingly capable of “a more intersubjective and indirect expression of stance” (p. 253). Focusing on doctoral theses written by Chinese- and English-speaking students, Geng and Wharton (2016) also found advanced-level EL2 writers performed similarly to EL1 writers in employing stance features, suggesting that “at the highest level of education, writers’ first language may not exert as much impact on academic writing as it arguably does when writers are at a lower level” (p. 89).

In terms of the second question, researchers have examined how students compare with expert writers, and incoming college students with their higher-level counterparts in enacting stance. Crosthwaite, Cheung, and Jiang (2017) compared academic texts written by undergraduates with expert writers’ and found that students used richer and more frequent hedging and boosting resources in marking their authorial stance. Aull et al. (2017) compared low- (first-year undergraduates), medium- (final-year undergraduates to year-three postgraduates), and advanced-expertise (published) writers, and noted that the frequency and range of generalisation features (such as *always*, *never*) distinguished the three groups’ stance-taking practices.

Based on previous studies, we may make two assertions. First, as students advance in curricular levels, disciplinary enculturation may be more important than linguistic backgrounds in students' academic writing performance, including their performance in using stance features. Consequently, when examining postgraduate students' stance performance, we may group L1 and L2 students for comparison with expert writers (Aull et al., 2017; Crosthwaite et al., 2017). Second, to discover the roles of disciplinary enculturation in writers' different stance-taking performances in academic writing, focusing on one discipline will be more feasible and reliable, especially if the metadiscourse features of the discipline's academic writing are comparatively prominent.

2.3. Under-explored stance in postgraduate student writing

Unlike the differences in stance-taking between L1 and L2 students, and students and experts, few studies have addressed the “deeper and more important issues of disciplinary enculturation and academic identity formation that graduate students undergo, and the role of academic writing in this trajectory” (Curry, 2016: 78). Students start to gain disciplinary identity – beginning their “disciplinary becoming” – in their postgraduate years (Dressen-Hammouda, 2008: 234). While scholars generally agree writing experience in a specific field improves rhetorical knowledge of that discipline (Beaufort, 2004), and a stance-taking developmental trajectory is found in undergraduate writing (Aull et al., 2017), existing scholarship on stance has not yet profiled stance-taking differences among postgraduate-level students.

This is an important gap to fill, given the different foci of learning, inquiry modes, programme outcomes, and degrees of disciplinary enculturation in undergraduate, master's, and doctoral learning. While undergraduate learning involves “summarizing, describing, identifying, and applying” knowledge, postgraduate learning requires “questioning, judging, and recombining ideas and information into an argument” (Ballard & Clanchy, 1997, cited in Paltridge & Starfield, 2007: 9) and developing an awareness that knowledge is rhetorically constructed and negotiable (Geisler, 1994). Given the different inquiry modes and learning purposes, undergraduate students may face different stance construction expectations; thus, findings on stance-taking development among undergraduates (Aull et al., 2017) may not be generalizable to postgraduate writing.

Likewise, research on doctoral students' use of stance expressions may not inform us about master's students' stance practices in their writing (El-Dakhs, 2018). Doctoral students, as scholarly participants in disciplinary communities, are often expected to project an expert, authoritative stance in their theses (Swales & Feak, 2012). In contrast, master's students, positioned between coursework and scholarly participation, may face different stance expectations from undergraduate and doctoral students. In research-based master's programmes, a master's dissertation is students' "stepping stone into the professional writing practices of their discipline" (Peters, 2011: 178). Students in programmes focusing on providing professional knowledge and training are also expected to be enculturated in their communities by the end of their candidature, via research projects or dissertations. Master's dissertations may exhibit stance-taking patterns that are different from doctoral theses or published research articles.

Surprisingly, claims about postgraduate student writing are often made without distinguishing between master's and doctoral writing. One exception is Hyland (2004), who analysed stance in postgraduate writing from six disciplines and discovered that master's students used slightly more stance features than doctoral students. Another study conducted by Dahme and Sastre (2015) followed biomedical science students who became researchers in the field, and found that they employed more attitude markers and self-mentions in their later published articles than in their master's dissertations, which the researchers explained as symptomatic of students' "lack of mastery of disciplinary rhetorical conventions" (174).

2.4. Undiscovered developmental trajectory of stance in applied linguistics

As stance-taking practices are highly sensitive to disciplinary cultures (Hu & Cao, 2015), we focused on a single discipline – applied linguistics with a special focus on second and foreign language learning and teaching (Hu & Cao, 2011) – when comparing master's students' features in enacting an authorial stance to those of doctoral and published writers. One rationale for choosing applied linguistics is that the authors are language specialists who are more familiar with the linguistic and rhetorical features of applied linguistics research genres than researchers from other disciplines; thus, there would be more opportunities to identify stance projection pertaining to the genre (Kawase, 2015). In addition, previous studies (Hyland, 1998) of disciplinary differences in the use of interactional metadiscourse revealed

“the greater role of explicit personal interpretation of research” (Hyland & Tse, 2004: 173), and more careful interpretation of findings in the academic writing of applied linguists than in texts by hard-science researchers. Research focusing on applied linguistics alone (El-Dakhs, 2018; Hu & Cao, 2011) mostly explores metadiscourse markers in different moves of a specific section (Liu & Buckingham, 2018) or compares L1 and L2 scholars’ stances (Abdollahzadeh, 2011).

Notwithstanding attention to the use of metadiscourse markers in applied linguistics research writings (e.g., El-Dakhs, 2018; Hu & Cao, 2011), few studies on applied linguistics (Hyland & Tse, 2005; Kuhl & Behnam, 2011) adopt a “developmental perspective” to analyse research genres produced by writers at various degrees of disciplinary enculturation. El-Dakhs (2018), for example, compared the use of metadiscourse in abstracts of doctoral theses and research articles, and found doctoral students employed more hedges but fewer self-mentions than did expert writers. Kuhl and Behnam (2011) compared metadiscourse use in research articles, handbook chapters, and scholarly and introductory textbook chapters, and found academic texts conveyed not only professional knowledge, but also different stakeholders’ academic communication struggles. Given that scientific/academic knowledge is developed from empirical research to a shared, embedded, and respected routine in the discourse community, there could exist a developmental trajectory from less-enculturated to more experienced researchers. Our current study addresses this issue by comparing stance features in master’s dissertations, doctoral theses, and research articles.

3. Material and methods

3.1. Corpus construction

We compiled a corpus of approximately three million words, comprising 30 master’s dissertations, 30 doctoral theses, and 60 published research articles from applied linguistics. Following Hu and Cao’s (2011) scope of research, we focused on applied linguistics writings on second or foreign language learning and teaching. Master’s students, doctoral candidates, and experts in the corpus are a mixture of L1 and L2 English speakers, as scholars (Casanave, 2014; Curry, 2016) claim that L1 and L2 writers face similar challenges with academic English, and existing literature (Geng & Wharton, 2016) reveals no obvious stance-taking differences in L1 and L2 learners’

academic texts. The EL2 writers are from various L1 backgrounds, including Chinese, Japanese, and Korean.

Table 1 characterises the corpus by the total number of words and the average length of each piece of writing. The dissertations and theses were searched via ProQuest dissertations database and a library dissertations database at a university in Hong Kong, using keywords including “second or foreign language teaching,” “language learning,” “language acquisition,” and “applied linguistics.” The first author downloaded the dissertations and theses, which were submitted in pursuit of Master of Arts or Education and Doctor of Philosophy degrees. We randomly selected 30 master’s dissertations and 30 doctoral theses submitted from 2005 to 2017. These dissertations include studies adopting quantitative or qualitative methods. Only the abstracts and main bodies of the writings were included. Interview extracts appearing in the main texts were excluded.

Sixty research articles published in high-impact-factor, English-medium SSCI (Social Science Citation Index) journals for applied linguistics were selected based on the Web of Science database 2016, including *Applied Linguistics*, *TESOL Quarterly*, *Language Learning*, *Studies in Second Language Acquisition*, *Modern Language Journal*, *Journal of Second Language Writing*, *Language Teaching*, *Language Teaching Research* and *System*. The first author manually downloaded articles published from 2005 to 2017 that related to second or foreign language learning and teaching. All articles were single-authored, by authors describing themselves as assistant professors or above when the articles were published. We randomly selected 60 of these quantitative or qualitative research articles. Only the abstracts and main parts of the articles were included, with in-text interview extracts excluded.

	Master	Doctoral	Expert	Total
Total no. of words	525,631	1,910,186	530,676	2,966,493
Average text length	17,521	63,673	8,845	24,721

Table 1: Description and composition of the corpora.

3.2. Analytical focus

Drawing on Hyland’s (2005a) list of stance features, we used the concordance function of Lawrence Anthony’s AntConc software (version 3.4.4, 2016) to identify authors’ stance features, then coded them manually.

The normalized frequencies of stance features, boosters, attitude markers, hedges, and self-mentions per 1,000 words were then calculated. The first author coded all the data and the second author coded 20%, yielding an inter-coder reliability above 95% for all data sets.

To compare stance features in the three groups' writing, we conducted one-way between-subjects analysis of variance analyses (ANOVA) via SPSS software. The alpha was set at .05. If the one-way ANOVA results achieved a significant level, Tukey's HSD test was conducted to make *post hoc* pairwise comparisons among the groups. The interpretation for the effect size, partial η^2 , followed Cohen's (1988) scale, in which .01, .06, and .14 are dividing lines between small, medium, and large effect sizes. Drawing upon Hyland's (2005a, 2005b) list, we conducted contextualized analyses of the functions and effects of stance features by considering the stretches of discourse in which they appeared.

4. Findings and discussion

This study compared the use of stance features in master's dissertations, doctoral theses, and experts' research articles in applied linguistics (more specifically, the field of second and foreign language learning and teaching). Table 2 presents the mean normalized frequencies per 1,000 words and standard deviations for stance markers, hedges, boosters, attitude markers, and self-mentions. Table 3 presents the results of the *post hoc* Turkey HSD tests following the ANOVA tests. The findings are presented and discussed in the following paragraphs.

	Master	Doctoral	Expert	F	<i>p</i>	Partial η^2
hedges	15.83 (8.03)	12.43 (4.11)	12.10 (3.65)	5.547	.005**	.09
boosters	8.36 (4.32)	6.38 (1.97)	5.81 (1.55)	9.676	.000**	.14
attitude	3.69 (2.54)	2.55 (0.89)	2.50 (1.02)	6.697	.002*	.10
self-mentions	3.18 (0.62)	3.77 (0.62)	5.16 (0.44)	4.005	.021*	.60
stance	31.06 (13.96)	25.13 (7.23)	25.57 (4.82)	4.931	.009**	.08

Note. * means $p < .05$, ** means $p < .01$.

Table 2: Results for stance markers.

	Master-Doctoral	Master-Expert	Doctoral-Expert
hedges	.033*	.005**	.954
boosters	.011*	.000**	.595
attitude	.012*	.002**	.987
self-mentions	.776	.026*	.158
stance	.022*	.013*	.972

Note. * means $p < .05$, ** means $p < .01$.

Table 3: Statistical significance of stance marker differences between corpora.

4.1. Hedges

Hedges (Extract 1) are considered as one kind of communicative strategy for weakening the force of authorial claims (Hyland, 1998; Myers, 1989). As a rhetorical device, they are usually adopted to project authors' reservation or uncertainty about their statements, or to express their humility and respect for the opinions of other scholars in the disciplinary community, which creates space to interact with potential readers (Hyland, 1998). Example:

- (1) This *may* account for the humbleness in the self-denigration of the “dean” in the roleplay data. (PhD 04; Findings)

From Table 2, hedges were the most frequent stance feature for the three writer groups, indicating they all intended to express reservations about their claims or respect for others' statements. However, there exists a reducing trajectory concerning the normalized frequency of hedges among the three writer groups, suggesting that, as writers became more enculturated in the disciplinary community and more exposed to the research field's rhetorical conventions, they tended to hedge less. Table 3 shows master's students deployed significantly more hedges in their dissertations than did doctoral candidates and expert writers, and that there were no significant differences between the latter two groups.

Based on Hyland's (2005a) taxonomy and Lee & Deakin's (2016) list of hedge sub-categories, content-oriented and reader-oriented hedges were also analysed. According to Hyland (1996: 439), content-oriented hedges (i.e. accuracy- and writer-oriented hedges) “[concern] a statement's adequacy conditions: the relationship between proposition and a representation of reality.” Accuracy-oriented hedges (such as *about*) represent writers' tentativeness about the accuracy or reliability of the propositional content. Writer-oriented hedges (such as *assume*) reduce writers' commitments to their statements. Furthermore, reader-oriented hedges (such as *believe*) attend to readers' acceptance of writers' statements, using expressions of modesty and deference.

Table 4 presents the normalized frequencies of hedge sub-categories among the three writer groups and the significant differences between corpora, from one-way ANOVA test results. Though the differences were not significant, master's students deployed higher frequencies of accuracy- and writer-oriented hedges than did other writers, indicating they tended to express uncertainty regarding their own statements and reservations about

others' (Hyland, 2005a; Aull & Lancaster, 2014). Master's students include many reader-oriented hedges to convey their deference and respect for dissertation readers (examiners and supervisors) and display humility. They distance themselves from statements to expand the dialogic space, so that their assertions are less likely to be challenged by examiners (Hyland, 2005a).

Though no significant difference in hedges was noticed between doctoral theses and published research articles, doctoral students adopted slightly more accuracy-oriented and reader-oriented hedges, perhaps reflecting genre differences. Previous literature (Curry, 2016; El-Dakhs, 2018) suggests the educational genre (dissertations, theses) serves purposes of learning and assessing students' disciplinary content knowledge, whereas high-stake genres (research articles) are professional, written and reviewed by scholars with higher degrees of enculturation in the disciplinary community. As assessors, supervisors and examiners hold authoritative power over doctoral candidates; thus, doctoral students might be cautious when stating propositional content and attempt to obtain supervisors' and examiners' acceptance. However, expert writers are at an advanced stage of disciplinary enculturation, and their power balance with disciplinary gatekeepers (reviewers and editors) may be more equal, so they may deploy fewer accuracy-oriented and reader-oriented hedges (Kawase, 2015). However, doctoral candidates and experts had similar writer-oriented hedge practices. As doctoral candidates obtained more professional knowledge and greater familiarity with the research field's rhetorical conventions, they seem to become more confident about their claims, and make less use of writer-oriented hedges.

Hedges categories	Normalized frequencies (per 1,000 words)			Statistical significances between corpora		
	Master	Doctoral	Expert	Master-Doctoral	Master-Expert	Doctoral-Expert
Accuracy	9.06	7.74	7.57	$p = .358$	$p = .175$	$p = .976$
Writer	1.98	1.80	1.78	$p = .709$	$p = .539$	$p = .988$
Reader	4.15	2.84	2.34	$p = .002^{**}$	$p = .000^{**}$	$p = .272$

Table 4: Hedging categories: normalized frequencies and statistical differences between groups.

4.2. Boosters

Boosters (Extract 2) display writers' assertiveness, conviction, and confidence about their propositions. By using boosters, writers "mark involvement and solidarity with an audience, stressing shared information, group membership, and direct engagement with readers" (Hyland, 1998:

350); they can also project politeness, truthfulness, and sincerity (Brown & Levinson, 1987). Example:

- (2) ...there are *obviously* similarities between how a teacher feels when presented with a smaller class (“less of a burden”) and when a student is asked to speak in front of a class that is almost half the size of a regular class. (PhD 16; Findings)

From Table 2, writers with more disciplinary enculturation deployed fewer boosting features. This decrease was obvious between master’s students and both their doctoral counterparts and expert writers (Table 3). Table 5 shows the normalized frequencies of emphatics (reinforce truth value, such as *really*) and amplifying adverbs (strengthening verbs and adverbs, such as *always*) (Hyland, 2005b: 13). Although most boosters (over 66%) among the three writer groups were emphatics, that is, used for stressing the certainty of their or others’ views, one-way ANOVA test results indicated a decrease in emphatics from master’s and doctoral students to expert writers, and significant differences in emphatics between master’s students and expert writers. The frequencies of amplifying adverbs also decreased as writers became more enculturated; master’s students inserted significantly more amplifying adverbs than other writers.

Though all three groups projected politeness and marked involvement toward the audience via boosters, this feature’s higher frequency in postgraduate writing suggests master’s and doctoral students might have deemed doing so more important. As Hyland (2005a: 53) observed, boosters “emphasise certainty and construct rapport by marking involvement with the topic and solidarity with an audience”; Hinkel (2005: 40) commented that intensifiers/boosters help “[reinforce] the truth-value of a proposition or claim or the strength of the writer’s conviction.” Given a perceived strong student-assessor power relationship, postgraduate students might have deliberately inserted boosters to reinforce claims, demonstrate certainty, and emphasise agreements with scholars’ views and establish direct engagement with supervisors and examiners. Example 3 was extracted from the literature review chapter of a master’s dissertation. Before the statement, the writer reviewed various scholars’ opinions towards the importance of motivation in L2 learning, then used “certainly” to align himself/herself with those scholars. Example:

- (3) As one can see, motivation is *certainly* one of the important factors in L2 acquisition, and *there is no doubt* that in order to be a successful learner one

needs to be motivated and exert much effort into the learning process.
(Master 10; Literature review)

The decreasing occurrence of boosters could also be explained by the master's students' developmental trajectory when compared to expert writers. As observed in previous studies (Hyland, 2012; Crosthwaite et al., 2017), novices' use of metadiscourse features is different from that of more experienced writers. Aull and Lancaster (2014) point out that beginning writers tend to overuse intensifying boosters (*very, certainly*), projecting an overgeneralized and less measured stance, while advanced academic writers delimit their own opinions and construct a stance presenting "academically appropriate acknowledgment" (p. 175). As part of the trend, master's students might overgeneralize some statements, leaving limited space for alternative views and resulting in a comparatively higher frequency of boosters.

Boosters categories	Normalized frequencies (per 1,000 words)			Statistical significances between corpora		
	Master	Doctoral	Expert	Master-Doctoral	Master-Expert	Doctoral-Expert
Emphatics	5.61	4.78	4.44	$p = .097$	$p = .003^{**}$	$p = .597$
Amplifying verbs/adverbs	2.74	1.59	1.37	$p = .047^*$	$p = .003^{**}$	$p = .852$

Table 5: Normalized frequencies of emphatics and amplifying verbs/adverbs and differences between corpora.

4.3. Attitude markers

Attitude markers usually express affective feelings about propositions (Extract 4). As Hyland (2005b: 180) put it, "By signalling an assumption of shared attitudes, values and reactions to material, writers both express a position and pull readers into a conspiracy of agreement so that it can often be difficult to dispute these judgements." Example:

- (4) The analysis of the email (Extract 7) shows that the project manager, Katy, was included in the salutation, but what is *interesting* is that Katy does participate in this email chain at all. (PhD 15; Findings)

From Table 2, for the three writer groups, attitude markers accounted for a small proportion of stance markers (around 10%), similar to previous studies' findings (Lee & Deakin, 2016; Li & Wharton, 2012). Table 3 further reveals that master's students more frequently deployed personal attitudes than doctoral candidates and expert writers, whose normalized frequencies of attitude markers were quite similar. For the sub-categories of attitude

markers (Hyland, 2005a) in Table 6, a decreasing trajectory in attitude verbs (*agree*) and adjectives (*important*) was noticed across master’s students, doctoral candidates, and expert writers, with the differences between master’s students and experts being significant, while those between doctoral counterparts and experts were not obvious. Adjectives were the most common attitude markers, followed by attitude verbs.

When considering the contextualized functions of attitude markers, we found that expert writers tended to express affective attitudes about the findings and contributions of their studies (Extract 5). Besides providing attitudinal comments on their results, doctoral candidates employed attitude markers to assert the research gaps in the introduction or literature review chapters (such as “a bit surprising” in Extract 6), consistent with Kawase’s (2015) finding. In master’s dissertations, most attitude markers appeared in the literature review to reinforce existing theories or claims, showing writers’ positive feelings (agreement, preference) towards other scholars’ views (Extract 7). Using these attitude markers, master’s students might intend to demonstrate their knowledge, respect for scholars, and eagerness to align with the disciplinary academic community. Example:

- (5) This has *important* implications for pronunciation instruction. (Expert 28; Implications)
- (6) Given that social contexts play an *important* mediating role in accordance with sociocultural theory, it is also *a bit surprising* to note the absence of a detailed account of the cultural and social contexts as well as the contextual influences upon English learning in these studies. (PhD 30; Literature Review)
- (7) Goal setting is *important* because, as proposed in goal theories... (Master 07; Literature Review)

Attitude markers	Normalized frequencies (per 1,000 words)			Statistical significances between corpora		
	Master	Doctoral	Expert	Master-Doctoral	Master-Expert	Doctoral-Expert
Attitude verb	1.27	0.68	0.67	$p = .016^*$	$p = .004^{**}$	$p = 1.000$
Sentence adv.	0.31	0.17	0.29	$p = .358$	$p = .955$	$p = .399$
Adjective	2.11	1.71	1.54	$p = .185$	$p = .013^{**}$	$p = .675$

Table 6: Normalized frequency of attitude marker sub-categories and differences between corpora.

4.4. Self-mentions

Self-mention markers (Extract 8) refer to “the use of first person pronouns and possessive adjectives to present propositional, affective and interpersonal information” (Hyland, 2005b: 181), and convey writers’ stance and authorial identity. While science researchers aim to create an objective situation for their studies without self-mentioning, in the humanities and social sciences, a personal pronoun means the writer intends to project a strong relationship with his/her claims, such as reinforcing his/her contribution or seeking audience agreement (Hyland, 2005a). Example:

- (8) What *I am arguing* for in short story analysis is that it serves as a heuristic for the systematic thematic analysis of the content and context of narrative data (in the form of short stories). (Expert 27; Methodology)

Tables 2 and 3 reveal an increasing use of self-mentions from master’s dissertations to doctoral theses to published research articles, with significant differences in the use of personal pronouns between master’s students and expert writers. These findings seem to indicate that writers become more comfortable marking their textual existence through self-mentions as they gain disciplinary enculturation.

In master’s dissertations, “we” was the most frequent self-mention marker (64% of all first-person pronouns), suggesting master’s students’ intent to involve readers in their statements or arguments. Similar to Kawase (2015), we found master’s students used “we” to comment on previous studies or address research gaps in the introduction, to include themselves as members of the successful/expert group and reduce their risk of being challenged (Myers, 1989). Furthermore, master’s students adopted “we” when reporting their study’s findings. In these cases, “we” was often collocated with hedges, such as “as we can see” and “we could conclude that”, which may have been used to involve readers in agreeing with the writers’ interpretations. In comparison, expert writers more frequently used “I” in published research articles (92% of all first-person pronouns), thus reinforcing their authoritativeness (Hyland, 2004). While doctoral theses are written for degree accreditation, doctoral writers, having more experience in the research field, seemed more at ease striking an authoritative tone, and thus made more self-mentions than master’s students.

The functions of self-mention “I” were further analysed based on previous taxonomies (Harwood, 2005; Peters, 2011). The findings echo Harwood’s

(2005), in that postgraduate students adopted a wide range of methodological “I” to elaborate their studies’ procedures. More specifically, master’s students used methodological “I” for methodological description, but seldom for overcoming methodological pitfalls. Instead, master’s students stated purposes via “I”, such as “In this chapter, I am going to...” Furthermore, they deployed personal “I” in their dissertations, meaning they praised personal narratives (such as personal experience) to motivate their topic and establish their arguments’ importance. Such use of personal “I” (Extract 9) emphasised that a research topic was defined by the writer’s personal observation, thus directing readers’ attention to what the writer had done (Ellis & Bochner, 2001). Example:

- (9) As a full-time English tutor in mass tutorial schools for over four years, I gained some insights about English learning under shadow education in Hong Kong... *I aspired to* conduct a study on learners’ experience under shadow education, in order to yield insights on how to provide students with better English learning experience. (Master 11; Introduction)

A wider range of functions for personal “I” was observed in doctoral theses and published research articles, with personal “I” being used when making arguments, defining terms, describing methodological issues, and stating purposes (Harwood, 2005). Doctoral candidates and expert writers attended more to knowledge production; they deflected expertise and diverted readers’ attention away from their agentive role (Peters, 2011). They also discussed prior scholarships and brought out new knowledge or arguments more directly.

4.5. Stance markers

For the overall occurrences of stance markers (Table 2), the ANOVA test yielded significant differences among the three writer groups, with a medium effect size. From Table 3, master’s students included significantly more stance features in their dissertations than did doctoral counterparts and expert writers. While Hyland (2004) proposed that, compared with master’s students, doctoral counterparts are more tentative in presenting their “‘academic’ reader-friendly prose” (p. 141) and in interacting with potential readers, our findings suggest that master’s students were most obvious in signalling their voice or personality, and expressing their academic persuasion. Master’s students seemed the most modest and lacking in confidence, and they thus used more hedges to show their respect for

potential readers and scholars and were more tentative about their claims. Another possible reason is that master's students may not have manifested their stance well enough because of their limited knowledge about academic conventions and genre characteristics (Bitchener & Basturkmen, 2006; El-Dakhs, 2018).

While doctoral candidates adopted slightly fewer stance markers than expert writers, no significant differences were found. This suggests that, regardless of the differences between educational and professional genres, doctoral candidates and expert writers were similarly sensitive in projecting their authorial voices and interacting with readers. This may be explained by doctoral candidates' mastery of disciplinary rhetorical conventions, improved writing competence, and greater academic knowledge (compared to masters' students) as they become more enculturated in the field.

5. Concluding remarks

This study makes a nuanced comparison of the stance features used by master's, doctoral, and expert writers in applied linguistics, specifically emphasising second and foreign language learning and teaching, and sheds some light on the differences in writers' stance-taking at different stages of their disciplinary enculturation. Since appropriate use of stance expressions should "display excitement and commitment... but be objective" and show assertiveness but "allow for other viewpoints" (Lancaster, 2016: 295-297), the scope and patterns of stance in master's dissertations presented in this study underscore the need for teachers to facilitate these students' disciplinary enculturation and familiarise them with the field's rhetorical conventions. For example, teachers could integrate awareness-raising tasks, involving students in contrasting the stance-taking practices valued in expert writing with their own performance. They could also engage students in deliberate stance-projecting practices by emulating expert writers' performance and introduce them to corpus tools, to help them become effective, informed writers who are aware of the discipline's valued stance resources and can establish an authoritative and objective stance in their own writing.

Given previous studies have revealed disciplinary differences regarding authorial stance in academic writing (Hyland, 2004), the findings of this study may not be generalized to disciplines other than applied linguistics.

Future research involving a wider range of disciplines is needed. Furthermore, this study adopted cross-sectional data (master's dissertations, doctoral theses, research articles) to address the developmental trajectories of applied linguistics researchers. It remains unknown whether the findings are consistent with the "development turmoil" (Peters, 2011: 184) novice researchers experience while transiting to expert writers, which warrants further exploration. Corpus-based analyses provided valuable insights on stance in academic writing among the three groups of second language education researchers. A more comprehensive and in-depth picture would be generated were interviews about their perceptions of academic stance and inner thoughts (Lancaster, 2016) included.

Acknowledgements

We would like to express our sincere gratitude to Professor Carmen Sancho Guinda and the two anonymous reviewers for their insightful comments on our research article. Special thanks go to Professor Feng (Kevin) Jiang for his invaluable advice.

Article history:
Received 26 October 2018
Received in revised form 11 May 2019
Accepted 11 May 2019

References

- Abdollahzadeh, E. (2011). "Poring over the findings: interpersonal authorial engagement in applied linguistics papers". *Journal of Pragmatics* 43(1): 288-297.
- Anthony, L. (2016). *AntConc* (Version 3.4.4) [Computer Software]. Tokyo: Waseda University. URL: <http://www.laurenceanthony.net/> [12/06/18].
- Aull, L., D. Bandarage. & M. Miller (2017). "Generality in student and expert epistemic stance: A corpus analysis of first-year, upper-level, and published academic writing". *Journal of English for Academic Purposes* 26: 29-41.
- Aull, L. & Z. Lancaster (2014). "Linguistic markers of stance in early and advanced academic writing: A corpus-based comparison". *Written Communication* 31(2): 151-183.
- Beaufort, A. (2004). "Developmental gains of a history major: A case for building a theory of disciplinary writing expertise". *Research in the Teaching of English* 39(2): 136-185.
- Bitchener, J. & H. Basturkmen (2006). "Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section". *Journal of English for Academic Purposes* 5, 4-18.
- Brown, P. & S. Levinson (1987). *Politeness*. Cambridge: Cambridge University Press.
- Casanave, C. (2014). *Before the Dissertation: A Textual Mentor for Doctoral Students at Early Stages of a Research Project*. Ann Arbor: University of Michigan Press.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed. Mahwah, NJ: Lawrence Earlbaum.
- Crosthwaite, P., L. Cheung & F. Jiang (2017). "Writing with attitude: Stance expression in learner

- and professional dentistry research reports". *English for Specific Purposes* 46: 107-123.
- Curry, M. J. (2016). "More than language: Graduate student writing as 'disciplinary becoming'" in S. Simpson, N. A. Caplan, M. Cox & T. Phillips (eds.), *Supporting Graduate Student Writers: Research, Curriculum, and Program Design*, 78-96. Ann Arbor: University of Michigan Press.
- Dahme, A. P. & M. S. Sastre (2015). "The transition from university to publication: Register and interactional metadiscourse features in immunology research written in Catalan and English". *Ibérica, Journal of the European Association of Languages for Specific Purposes* 30: 155-182.
- Dressen-Hammouda, D. (2008). "From novice to disciplinary expert: Disciplinary becoming and genre mastery". *English for Specific Purposes* 27: 233-252.
- Dressen-Hammouda, D. (2014). "Measuring the voice of disciplinarity in scientific writing: A longitudinal exploration of experienced writers in geology". *English for Specific Purposes* 34: 14-25.
- El-Dakhs, D. A. S. (2018). "Why are abstracts in PhD theses and research articles different? A genre-specific perspective". *Journal of English for Academic Purposes* 36: 48-60.
- Ellis, C. & A. Bochner (2000). "Autoethnography, personal narrative, reflexivity: Researcher as subject" in N. Denzin & Y. Lincoln (eds.), *The Handbook of Qualitative Research*, 2nd ed., 733-768. Newbury Park, CA: Sage.
- Flowerdew, J. (2015). "Revisiting metadiscourse: Conceptual and methodological issues concerning signalling nouns". *Ibérica, Journal of the European Association of Languages for Specific Purposes* 29: 15-34.
- Geisler, C. (1994). *Academic Literacy and the Nature of Expertise*. Mahwah, NJ: Lawrence Erlbaum.
- Geng, Y. & S. Wharton (2016). "Evaluative language in discussion sections of doctoral theses: Similarities and differences between L1 Chinese and L1 English writers". *Journal of English for Academic Purposes* 22: 80-91.
- Gray, B. & D. Biber (2012). "Current conceptions of stance" in K. Hyland & C. Sancho Guinda (eds.), *Stance and Voice in Written Academic Genres*, 15-33. London: Palgrave Macmillan.
- Harwood, N. (2005). "I hoped to counteract the memory problem, but I made no impact whatsoever": Discussing methods in computing science using *f*. *English for Specific Purposes* 24(3): 243-267.
- Hinkel, E. (2005). "Hedging, inflating, and persuading in L2 academic writing". *Applied Language Learning* 15(1/2): 29-53.
- Hu, G. & F. Cao (2011). "Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English- and Chinese-medium journals". *Journal of Pragmatics* 43(11): 2795-2809.
- Hu, G. & F. Cao (2015). "Disciplinary and paradigmatic influences on interactional metadiscourse in research articles". *English for Specific Purposes* 39: 12-25.
- Hyland, K. (1996). "Writing without conviction? Hedging in science research articles". *Applied Linguistics* 17: 433-454.
- Hyland, K. (1998). "Boosting, hedging and the negotiation of academic knowledge". *Text* 18(3): 349-382.
- Hyland, K. (1999). "Disciplinary discourses: Writer stance in research articles" in C. N. Candlin & K. Hyland (eds.), *Writing: Texts, Processes and Practices*, 99-121. London: Longman.
- Hyland, K. (2004). "Disciplinary interactions: Metadiscourse in L2 postgraduate writing". *Journal of Second Language Writing* 13: 133-151.
- Hyland, K. (2005a). *Metadiscourse: Exploring Interaction in Writing*. London: Continuum.
- Hyland, K. (2005b). "Stance and engagement: A model of interaction in academic discourse". *Discourse Studies* 7: 173-192.
- Hyland, K. (2012). "Undergraduate understandings: Stance and voice in final year reports" in K. Hyland & C. Sancho Guinda (eds.), *Stance and Voice in Written Academic Genres*, 134-150. London: Palgrave Macmillan.
- Hyland, K. & P. Tse (2004). "Metadiscourse in academic writing: A reappraisal". *Applied Linguistics* 25(2): 156-177.
- Hyland, K. & P. Tse (2005). "Hooking the reader: A corpus study of evaluative *that* in abstracts". *English for Specific Purposes* 24: 123-139.
- Jiang, F. & X. Ma. (2018). "'As we can see': Reader engagement in PhD candidature confirmation reports". *Journal of English for Academic Purposes* 35: 1-15.
- Kawase, T. (2015). "Metadiscourse in the introductions of PhD theses and research articles". *Journal of English for Academic Purposes* 20: 114-124.

- Koutsantoni, D. (2006). "Rhetorical strategies in engineering research articles and research theses: Advanced academic literacy and relations of power". *Journal of English for Academic Purposes* 5(1): 19-36.
- Kuhi, D. & B. Behnam (2011). "Generic variations and metadiscourse use in the writing of applied linguistics: A comparative study and preliminary framework". *Written Communication* 28(1): 97-141.
- Lancaster, Z. (2014). "Making stance explicit for second language writers in the disciplines: What faculty need to know about the language of stance-taking" in T. Zawacki & M. Cox (eds.), *WAC and Second Language Writers: Research towards Linguistically and Culturally Inclusive Programs and Practices*, 269-294. Fort Collins, Colorado: The WAC Clearinghouse.
- Lancaster, Z. (2016). "Expressing stance in undergraduate writing: Discipline-specific and general qualities". *Journal of English for Academic Purposes* 23: 16-30.
- Lee, J. & L. Deakin (2016). "Interactions in L1 and L2 undergraduate student writing: Interactional metadiscourse in successful and less-successful argumentative essays". *Journal of Second Language Writing* 33: 21-34.
- Li, T. & S. Wharton (2012). "Metadiscourse repertoire of L1 Mandarin undergraduates writing in English: A cross-contextual, cross-disciplinary study". *Journal of English for Academic Purposes* 11(4): 345-356.
- Liu, Y. & L. Buckingham (2018). "The schematic structure of discussion sections in applied linguistics and the distribution of metadiscourse markers". *Journal of English for Academic Purposes* 34: 97-109.
- Myers, G. (1989). "The pragmatics of politeness in scientific articles". *Applied Linguistics* 10: 1-35.
- Paltridge, B. & S. Starfield (2007). *Thesis and Dissertation Writing in a Second Language: A Handbook for Supervisors*. Abingdon: Routledge.
- Peters, S. (2011). "Asserting or deflecting expertise? Exploring the rhetorical practices of master's theses in the philosophy of education". *English for Specific Purposes* 30(3): 176-185.
- Ryshina-Pankova, M. (2011). "Developmental changes in the use of interactional resources: Persuading the reader in FL book reviews". *Journal of Second Language Writing* 20: 243-256.
- Samraj, B. (2008). "A discourse analysis of master's theses across disciplines with a focus on introductions". *Journal of English for Academic Purposes* 7(1): 55-67.
- Silver, M. (2003). "The stance of stance: A critical look at ways stance is expressed and modeled in academic discourse". *Journal of English for Academic Purposes* 2: 359-374.
- Soler-Monreal, C. (2016). "A move-step analysis of the concluding chapters in computer science PhD theses". *Ibérica, Journal of the European Association of Languages for Specific Purposes* 32: 105-132.
- Soliday, M. (2004). "Reading student writing with anthropologists: Stance and judgment in college writing". *College Composition and Communication* 56(1): 72-93.
- Swales, J. & C. Feak (2012). *Academic Writing for Graduate Students: Essential Tasks and Skills*, 3rd ed. Ann Arbor, MI: University of Michigan Press.
- Wu, S. (2006). "Creating a contrastive rhetorical stance investigating the strategy of problematization in students' argumentation". *RELC Journal* 37(3): 329-353.

Xuyan Qiu is a research assistant professor working at the School of Education and Languages of the Open University of Hong Kong. Her research interests include English for Academic Purposes and second language acquisition.

Xiaohao Ma is an English instructor in the School of Foreign Languages Education at Jilin University. She is interested in research of English for Academic Purposes, academic language and literacy development, and L2 academics and students writing in English.