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A Comparison of Introductions in Japanese-Authored Japanese Articles, Japanese-Authored English Articles, and Articles by English Native Speakers

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According to Swales's (2004) analysis of research articles (RAs), introductions generally involve three "moves," with Move 1 (M1) establishing a research territory, Move 2 (M2) identifying a gap in existing research, and Move 3 (M3) discussing how the current research addresses this gap. Some cross-linguistic studies have suggested that Asian writers organize introductions differently from English writers, with less use of M2, less employment of direct criticism of previous research, and more cycling of moves. The current study examined 75 applied linguistics RAs written during the last decade: (a) in English by English native speakers, (b) in Japanese by Japanese native speakers, and (c) in English by Japanese native speakers. Analysis showed that the RAs written by these three groups exhibited only minor differences. The results suggest that Japanese-authored RAs and English native-speaker RAs are converging around an agreed-upon set of disciplinary expectations.

　Swales（2004）の文献研究における分析によると、序文には一般的に次の3つの「ムーブ（動き）」が含まれる。ムーブ1（M1）では研究領域について述べ、ムーブ2（M2）では先行研究では明らかでないことを特定し、ムーブ3（M3）では当該研究においてM2を如何に明らかにするかを示す。既存の交差言語的研究では、アジアの研究者による序文の構成は英語を母語とする研究者のそれとは異なり、M2や先行研究の直接的な批評が少なく、ムーブの繰り返しが多いことが示唆されている。本研究では、過去10年間に発表された応用言語学の研究論文75本を（a）英語を母語とする者の英語の論文、（b）日本語を母語とする者の日本語の論文、（c）日本語を母語とする者の英語の論文の3つに分け分析した。その結果、この3グループ間にはわずか

な相違しか見られなかった。このことから、論文執筆者の母語が日本語か英語かに関わらず、双方によって書かれた研究論文は、合意された当該研究領域の期待の範囲内にまとまっていると示唆される。

W ithin the field of genre studies (e.g., Swales, 2004), researchers have attempted to provide a detailed picture of the rhetorical structure of research articles (RAs). The academic interest in this text genre is understandable given the central role of RAs in disseminating and constructing scientific knowledge and in establishing personal and institutional reputations (Hyland, 2016). Descriptions of RAs are of tremendous practical importance as they form the basis of pedagogical materials aimed at advanced L2 learners who must become proficient readers and, in many cases, producers of research. Genre studies in this area can also be helpful to English for Academic Purposes (EAP) instructors, who are often unfamiliar with discipline-specific and culture-specific rhetorical patterns.

For the purposes of this paper, RAs will be defined as reports of empirical research that have a conventional IMRD (introduction, method, results, discussion) structure. Studies of RA introductions have largely employed Swales's Create a Research Space (CARS) model (1990, 2004), which analyzes introductions in terms of rhetorical "moves." According to Swales (2004), moves are discoursal or rhetorical units that perform a coherent communicative function in written or spoken discourse and are realized by a clause or, at the other extreme, a series of sentences. In the 1990 and later versions of Swales's model, Move 1 (M1) establishes an initial research territory, Move 2 (M2) describes a gap in the research that is to be addressed in the research paper, and Move 3 (M3) states how the paper will address this gap. In his 2004 revision, Swales's model incorporates the possibility of iterating M1 and M2 sequences. The model also includes a series of "steps." The moves and steps in the 2004 version of Swales's model that will be used in the analysis in this paper are as follows:

Move 1:   Establishing a territory (citations required)
                   via
             Topic generalization of increasing specificity

Move 2:   Establishing a niche (citations possible)
                   via
             Step 1a: Indicating a gap
                   or

Step 1b: Adding to what is known

Step 2: (optional) Presenting positive justification

Move 3:   Presenting the present work (citations possible)
        via
    Step 1: Announcing present research descriptively, purposively, or both
    Step 2: Presenting research questions (RQs) or hypotheses
    Step 3: Definitional clarifications
    Step 4: Summarizing methods
    Step 5: Announcing principal outcomes
    Step 6: Stating the value of present research
    Step 7: Outlining the structure of the paper

In M3, Step 1 (S1) is said to be obligatory; Steps 2, 3, and 4 optional; and Steps 5, 6, and 7 probable in some fields and unlikely in others.

In the last three decades, extensive research has examined RA introductions. Much of this has been empirical research using either Swales's 1990 or 2004 model to analyze a small corpus of texts (generally, between 20 and 60 texts for each level of the independent variable). One strand of this research has examined linguistic or rhetorical elements within introductions (e.g., Chang & Schleppegrell, 2011) sometimes with a particular focus on one move (e.g., Shehzad, 2008). Another strand has examined practices within (e.g., Milagros del Saz Rubio, 2011) or between disciplines (e.g., Martín Martín & León Pérez, 2009) and subdisciplines (e.g., Atai & Habibie, 2009).

A third strand has compared introductions in RAs written in different languages. One assumption motivating this cross-linguistic research is that L2 writers, due to influence from L1 writing practices and culture, will often produce texts that violate the expectations of native speaker readers (Kaplan, 1966). Many of these studies have compared Romance languages with English (e.g., Hirano, 2009; Mur Dueñas, 2010) or Chinese with English (e.g., Loi, 2010; Loi & Evans, 2010).

Although the main focus of cross-linguistic research has been on the differences in rhetorical practices within diverse L1 communities, some researchers have asked whether L2 writers alter their rhetorical practices to converge with those of Anglophone academic communities. To answer this question they have examined, in addition to texts produced by nonnative researchers

writing in their L1, texts by nonnative researchers writing in English. For example, Sheldon (2011) examined the texts produced by Spanish-L1 researchers writing in Spanish, Spanish-L1 researchers writing in English, and English-L1 researchers writing in English. She found that whereas Spanish RAs, unlike their English counterparts, diverged from the CARS (2004) schema, the English RAs written by Spanish writers showed greater convergence.

Employing a similar research design, Ochi (2004) analyzed 180 Japanese-authored RAs from the fields of biology, medicine, and physics. Her corpus consisted of 60 articles from each field, half in English and half in Japanese. One strength of her study was the use of a large corpus, which was probably representative because it consisted of RAs from a wide range of journals. On the other hand, the analysis was very coarse-grained, consisting of sorting the introductions into three categories based on whether they strictly adhered to Swales's (1990) model, deviated from the model, or were missing key moves. For the most part, Ochi found few differences related to the language of the text with the exception of the biology RAs, in which case the number of English RAs following the standard model was roughly double that of the Japanese RAs. It should be noted that Ochi's study focused on RAs written mostly in 1999, so the findings may not provide a fully accurate picture of current rhetorical practices.

A general finding in previous studies is that in English RAs, M2 is generally common (e.g., Shehzad, 2008, found it in 94.6% of computer science RAs) and that according to some authors (e.g., Loi, 2010), within M2 English writers tend to critique specific authors more often than do writers of other language groups. Lower use of M2 has been found for a number of languages including Arabic (Alotaibi, 2013), Brazilian-Portuguese (Hirano, 2009), Chinese (Loi, 2010), Korean (Lee, 2001), Spanish (Burgess, 1997; but cf. Sheldon, 2011), Swedish (Fredrickson & Swales, 1994), and Thai (Jogthong, 2001), whereas similar use of M2 has been reported in one study on Persian (Mahzari & Maftoon, 2007). In research that has compared non-English RAs, English RAs written by the same L1 group and L1 English RAs (e.g., Al-Qahtani, 2006; Taylor & Chen, 1991), the nonnative writers often exhibited a tendency to use M2 more when writing in English, but even so, to use it less than their English-L1 counterparts.

The omission of M2 has been explained in a number of ways, particularly in terms of cultural factors. More collectivist cultures are said to place greater emphasis on group harmony and avoidance of overt disagreements (Oyserman, Coon, & Kemmelmeier, 2002), and therefore M2 (especially, an explicit M2S1a) may be avoided by writers from these cultures as it is indicative

of an adversarial style of discourse (Belcher, 1997, 2009). In short, rhetorical moves that explicitly identify shortcomings of specific authors could be viewed within some cultures as an unacceptable affront to other members of one's academic community (Taylor & Chen, 1991). Echoing these views, Loi and Evans (2010) specifically mention Confucian values (which have also been influential in Japan, Korea, and Vietnam) as an explanation for Chinese reticence to criticize specific authors. It may be contended that this line of argument overlooks the diversity of the Confucian tradition, exaggerates its significance in understanding current Asian practices, and is somewhat odd when applied to M2, given the prevalence of direct criticism of other authors within the Confucian tradition itself (see also Kubota, 1997; McKinley, 2013; Ryan & Louie, 2007; Vandermensbrugghe, 2004). Another possibility mentioned by Loi (2010) is that there is less competition in some non-English academic communities and thus less pressure to carve out a unique research space through direct criticism. A third plausible explanation is that researchers in non-English environments may have less access to sources and may also have only limited ability to read sources in English, which is often the preferred language for academic publication.

Turning to the more general question of whether Asian authors adapt to a new set of rhetorical practices after working in a Western academic setting, the research is unclear. Many anecdotal accounts (e.g., Fox, 1994) report that nonnative speakers find it difficult to adapt to English academic expectations within their discipline. However, several qualitative studies have suggested less difficulty. Cheng's (2006) study of a Chinese graduate student at a U.S. university reported that he had little difficulty in becoming a consumer and producer of academic criticism. Shi (2003), in a study of nine Western-trained TESOL professionals, found that the teachers adapted to Western practices and even promoted these practices in their teaching of both English and Chinese writing after they returned to China. Casanave's (1998) research on Japanese scholars returning to Japan also found that they were keenly aware of rhetorical differences.

To sum up the current state of research, at least two dozen articles have been written on cross-linguistic comparisons of RA introductions focusing on a wide range of languages. However, few English-language studies have examined the structure of introductions in Japanese-authored RAs. The current research makes a contribution to this area in four ways: (a) the examination of both Japanese articles and Japanese-authored articles provides insights into whether nonnative authors' rhetorical practices are primarily shaped by conventions of the L1 or L2 academic community; (b)

as Japan is within the Confucian cultural sphere of East Asia, the study helps determine the plausibility of suggestions that East Asian rhetorical conventions diverge from Anglophone practices due to cultural values associated with conflict avoidance; and (c) by providing an up-to-date and fine-grained cross-linguistic comparison, the study clarifies practices in applied linguistics and identifies potential areas of divergence between Japanese and English speakers that may need to be highlighted in pedagogical materials used in EAP courses targeting Japanese learners; and finally, (d) the analysis extends previous research through an examination of moves and steps in terms of occurrence and length, as well as cycling (i.e., recurrence of moves and steps). The discussion section of the paper provides a review of the findings within the context of previous research and outlines possible factors underlying the observed results as well as pedagogical implications.

The current research tested the following hypotheses regarding RAs written by English-L1 authors (E-RAs), RAs written in Japanese by Japanese authors (J-RAs), and RAs written in English by Japanese authors (JE-RAs).

H^1:   The three subcorpora will differ in their use of M2, with more E-RAs and fewer J-RAs containing M2.

H^2:   The three subcorpora will differ in the relative amount of text used to realize M2, with the E-RAs containing the longest M2s, the J-RAs the shortest M2s, and the JE-RAs at a middle position (i.e., with M2s shorter than those of the E-RAs but longer than those of the J-RAs).

H^3:   The three subcorpora will differ in terms of their use of critiques of specific authors, with more E-RAs containing such critiques and fewer J-RAs containing such critiques.

H^4:   There will be more cycling of moves in the J-RAs relative to the E-RAs and JE-RAs.

H^5:   There will be more cycling of moves in the JE-RAs relative to the E-RAs.

Method

To compare E-RAs, J-RAs, and JE-RAs, a corpus of 75 applied linguistics RAs, 25 from each group, was compiled. All the texts were peer-reviewed RAs published during the 10-year period between 2005 and 2014. To ensure that the RAs were representative and were not simply reflecting the idiosyncratic editorial policy of a particular journal, the articles were selected from a wide range of journals. The E-RAs (see Appendix A) came from 15 different journals, the J-RAs (see Appendix B) from 13 different journals, and

the JE-RAs (see Appendix C) from 17 different journals. To ensure greater representativeness, the selection procedure stipulated that each author only appeared as the lead author in one RA in each subcorpus. The E-RAs and JE-RAs were selected from Google Scholar (<https://scholar.google.co.jp>), whereas the J-RAs were selected from the CiNii (<http://ci.nii.ac.jp/>) database. Only full-length RAs reporting empirical research were selected. All of the J-RAs came from journals that were published in Japan, whereas the E-RAs and JE-RAs came from journals published in English in Western countries. To control for the potentially confounding influence of different publication dates across the corpora, selection procedures stipulated that the publication dates of RAs in each subcorpus must range from 2005 to 2014 with a median of 2009. To measure the proportion of the introduction devoted to each move and step, the lines in the introduction of each article were counted and the percentage of space devoted to each move and step was calculated as a percentage of each RA's introduction. Partial lines were measured and were counted as a percentage of a full line depending on their length relative to full lines of the text.

During the coding process, there were several issues that had to be resolved. A preliminary issue when analyzing RA introductions is defining where an introduction begins and ends. As just one example, one of the JE-RAs had an introduction section that also contained the entire description of the method. This "Introduction" was followed by a section labeled "Results." Unconventional headings were less of an issue in the English RAs (the E-RAs and JE-RAs) because many English-language journals require standard IMRD labeling of RA sections. For the purposes of this study, the introduction was defined as the initial section of the paper that occurs prior to the section of the paper detailing the method.

There were also some issues when coding M2. This move highlights gaps in current knowledge that will be filled by the current research. In the English RAs, the move is often clearly marked with words such as *few* (e.g., "few studies have examined . . .") or with contrasting statements, which are often preceded by *however*. In some cases, a statement is only clearly identifiable as M2 after the reader encounters M3 and realizes that the particular gap in knowledge highlighted earlier in the RA is being addressed by the study's research. For the purposes of the current study, any explicit statement of a gap in knowledge that was later addressed in M3 was regarded as part of M2.

The coding of M3 involved some minor issues, with M3S3 (definitional clarifications; see Table 5 for a list of M3 steps) in particular presenting some conceptual difficulties. Definitions are often taken from previous sources

and are often presented as accepted knowledge within a field, in which case the definition may quite naturally occur embedded within M1. In other cases, the definition may represent the author's own formulation and clarification, and it may be more naturally presented as part of M3. Bunton (2002) describes similar coding issues in his analysis of PhD theses. To complicate matters even further, in many papers, the line between what should count as a definition and a discussion of key concepts associated with the topic (part of M1) is quite vague. In light of these issues, M3S3 may be regarded as an ambiguous and problematic step within the current CARS model.

M3S4 (summarizing methods) also presents some coding issues. Identifying the method is generally straightforward: The method can be viewed as the procedural means of answering the research question. Yet in some research, the theoretical framework and, in many cases, the individual categories used in the analysis, are the primary focus of this step. To provide a more fine-grained analysis of M3S4, in this paper I will identify introductory sections that focus on procedures as M3S4a (summarizing methods), and sections that focus on clarification of theoretical frameworks, approaches, and categories as M3S4b (summarizing framework).

Results

All 75 RAs contained M1, which occurred as the initial move in all but one of the E-RAs. Five JE-RAs and seven J-RAs began with a different move (usually M3). M1 is typically the longest move as it must introduce the topic and discuss the relevant literature. This was also true of the three subcorpora, in which M1 accounted for two-thirds of the introduction, as shown in Table 1.

Table 1. Proportion of Introduction Devoted to M1 (Establishing a Territory) in the Three Subcorpora

E-RAs (n = 25)	J-RAs (n = 25)	JE-RAs (n = 25)
M (SD)	M (SD)	M (SD)
67.8% (22.0%)	63.8% (22.9%)	69.9% (21.4%)

Note. M1 = Move 1; E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

As shown in Table 2, M2 occurred in most of the RAs. The overall use of M2 in the three subcorpora is in line with that found for English-L1 RAs in previ-

ous research. Atai and Habibie (2009), for example, in their analysis of 60 applied linguistics RAs, found that M2 occurred in 93% of the RAs, whereas Sheldon (2011) found it in all 18 of the applied linguistics RAs in her study. In the current study, M2S1a (indication of a gap to be filled) was the most common step. The descriptive statistics show that more E-RAs contained a critique of a specific author. This requires some further explanation. In two of these RAs, the authors were actually noting shortcomings in their own previous research. In other instances, rhetorical devices often mitigated the author's criticism. One observed strategy was to put the criticism in a new paragraph with a vague reference to the work discussed earlier in the literature review. Many of the critiques, rather than finding actual fault with previous authors, used gap statements that simply highlighted areas that have yet to be explored. As shown in Table 2, roughly a fifth of the critiques of previous researchers were softened through the addition of offsetting praise placed either immediately before or after the critical comment (for a discussion of critique-mitigating strategies, see Hyland & Hyland, 2001).

Table 2. Occurrence of M2 (Establishing a Niche) in the Three Subcorpora

Move (step)	Occurrence (percentage of subcorpus)		
	E-RAs (n = 25)	J-RAs (n = 25)	JE-RAs (n = 25)
M2	23 (92%)	22 (88%)	24 (96%)
M2S1a (Indicating a gap)	18 (72%)	22 (88%)	22 (88%)
Critique of specific author(s)	10 (40%)	7 (28%)	5 (20%)
Use of offsetting praise	2 (8%)	1 (4%)	1 (4%)
M2S1b (Adding to what is known)	3 (12%)	1 (4%)	1 (4%)
M2S2 (Positive justification)	11 (44%)	8 (32%)	11 (44%)

Note. M2 = Move 2; S1 = Step 1; S2 = Step 2; E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

To determine whether there was a relationship between Corpus Type (with three levels, i.e., the E-RAs, J-RAs, and JE-RAs) and M2 occurrence (with two levels, i.e., occurrence and nonoccurrence), Fisher's Exact Test was conducted. The nonsignificant result (p = .865) showed a lack of sup-

port for H^1. A chi-square test of independence (see Table 3) was conducted to determine whether there was a relationship between Corpus Type (with three levels) and Critique of a specific author (with two levels, i.e., occurrence and nonoccurrence). The relation between these variables was nonsignificant at the .05 significance level, X^2 (2, N = 75) = 2.44, p = .295. H^3 was therefore also not supported.

Table 3. Chi-Square Test on Relation Between Corpus Type and Critique of Specific Authors

Subcorpus		Critique of specific author	
		Occurrence	Nonoccurrence
E-RAs	Count	10	15
	Expected count	7.3	17.7
J-RAs	Count	7	18
	Expected count	7.3	17.7
JE-RAs	Count	5	20
	Expected count	7.3	17.7

Note. E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

Table 4 shows the proportion of the introduction devoted to M2 and M2 steps in the three sets of RAs. As can be seen, M2 accounts for roughly a tenth of the introductions. Contrary to expectations, it is actually slightly longer in the J-RAs. That said, there are few differences between the three subcorpora.

Table 4. Proportion of Introduction Devoted to M2 (Establishing a
Niche) in the Three Subcorpora

Move (step)	E-RAs (*n* = 25) *M* (*SD*)	J-RAs (*n* = 25) *M* (*SD*)	JE-RAs (*n* = 25) *M* (*SD*)
M2 (Establishing a niche)	9.4% (11.3%)	13.5% (13.4%)	9.7% (9.1%)
M2S1a (Indicating a gap)	6.2% (8.8%)	8.0% (8.1%)	5.6% (4.8%)
M2S1b (Adding to what is known)	0.1% (0.4%)	0.2% (0.9%)	0.0% (0.1%)
M2S2 (Positive justification)	3.0% (6.0%)	5.4% (11.6%)	4.1% (8.8%)

Note. M2 = Move 2; S1 = Step 1; S2 = Step 2; E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

A one-way analysis of variance (ANOVA) was conducted with Corpus Type as the independent variable with three levels (E-RAs, J-RAs, and JE-RAs) and the percentage of the introduction devoted to M2 as the dependent variable. At an alpha of $p = .05$, the differences between the three subcorpora were nonsignificant, $F(2,72) = 1.0$, $p = .359$. H^2 thus did not receive support.

Table 5 shows the use of M3 in each subcorpus. As can be seen, all but one paper contained M3. The one JE-RA that omitted M3 contained a single sentence in the introduction stating the aims of the research (equivalent to M3S1) at the beginning of the paper's method section. Regarding the M3 steps, virtually all the papers described the current research (M3S1).

Table 5. Occurrence of M3 (Presenting the Present Work) in the Three Subcorpora

Move (step)	Occurrence (Percentage of subcorpus)		
	E-RAs (*n* = 25)	J-RAs (*n* = 25)	JE-RAs (*n* = 25)
M3 (Presenting the present work)	25 (100%)	25 (100%)	24 (96%)
M3S1 (Announcing research)	24 (96%)	24 (96%)	25 (100%)
M3S2 (RQs/hypotheses)	15 (60%)	6 (24%)	14 (56%)
RQs (Research questions)	10 (40%)	5 (20%)	13 (52%)
Hypotheses	6 (24%)	1 (4%)	1 (4%)
M3S3 (Definitional clarifications)	5 (20%)	8 (32%)	7 (28%)
M3S4a (Summarizing methods)	7 (28%)	4 (16%)	3 (12%)
M3S4b (Summarizing framework)	5 (20%)	7 (28%)	5 (20%)
M3S5 (Announcing outcomes)	2 (8%)	1 (4%)	1 (4%)
M3S6 (Stating value of research)	4 (16%)	4 (16%)	4 (16%)
M3S7 (Outlining structure of paper)	4 (16%)	5 (20%)	3 (12%)

Note. M3 = Move 3; S1 = Step 1; S2 = Step 2; S3 = Step 3; S4 = Step 4; S5 = Step 5; S6 = Step 6; S7 = Step 7; E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

One of the more salient differences between the subcorpora involved the presentation of research questions and hypotheses (M3S2). This step occurred in over half of the English-language RAs (in both the E-RAs and JE-RAs) but occurred in only a quarter of the J-RAs, suggesting a potential difference in disciplinary expectations within the Anglophone and Japanese academic

communities. To test whether this difference was statistically significant, a chi-square test of independence was conducted (see Table 6) with Corpus Type as one factor with three levels and the occurrence of M3S2 as the other factor with two levels (occurrence and nonoccurrence). The test found that the relation between the variables (i.e., Corpus Type and M3S2 occurrence) was significant at the .05 significance level X^2 (2, N = 75) = 7.82, p = .020.

Table 6. Chi Square Test on Relation Between Corpus Type and Occurrence of M3S2

Subcorpus		M3S2 (RQs/hypotheses)	
		Occurrence	Nonoccurrence
E-RAs	Count	15	10
	Expected count	11.7	13.3
J-RAs	Count	6	19
	Expected count	11.7	13.3
JE-RAs	Count	14	11
	Expected count	11.7	13.3

Note. M3 = Move 3; S2 = Step 2; E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

Both M3S3 (definitions) and M3S4 (summary of methods) occurred in approximately one quarter of the RAs in all three subcorpora. M3S5 (announcing main outcomes) virtually never occurred, suggesting that this is not a standard step in applied linguistics. M3S6 (stating the value of the present paper) was also rare, reflecting perhaps the fact that the value of much applied linguistic research is obvious to the readers. M3S7 (outlining the structure of the paper) was also rare, likely reflecting the fact that the RAs usually had standard IMRD labels for sections that are in fact required in most applied linguistics journals. Because applied linguistics readers are familiar with the IMRD structure, writers probably feel less need to explain the structure of their papers.

Turning to the amount of text devoted to M3 and M3 steps (see Table 7), the three subcorpora show many similarities. However, the E-RAs devoted less space to describing the present research (M3S1) and more space to describing current methods (M3S4). The low occurrence and short length

of Steps 5, 6, and 7 suggest that these steps are not so common in applied linguistics RA introductions (cf. Shehzad, 2010).

Table 7. Proportion of Introduction Devoted to M3 (Presenting Present Work) in the Three Subcorpora

Move (step)	E-RAs (*n* = 25) *M* (*SD*)	J-RAs (*n* = 25) *M* (*SD*)	JE-RAs (*n* = 25) *M* (*SD*)
M3 (Presenting present work)	22.8% (21.5%)	22.7% (15.7%)	20.4% (20.3%)
M3S1 (Announcing research)	4.8% (4.1%)	10.6% (7.6%)	8.3% (6.7%)
M3S2 (RQs and/or hypotheses)	3.2% (3.8%)	1.0% (2.6%)	2.1% (2.4%)
M3S3 (Definitional clarifications)	2.8% (6.8%)	3.4% (7.8%)	0.6% (1.3%)
M3S4a (Summariz-ing methods)	2.3% (5.5%)	3.2% (9.1%)	1.6% (5.2%)
M3S4b (Summariz-ing framework)	8.6% (21.0%)	3.0% (8.2%)	7.0% (17.1%)
M3S5 (Announcing outcomes)	0.6% (1.7%)	0.1% (0.7%)	0.1% (0.4%)
M3S6 (Stating value of research)	0.2% (0.6%)	0.3% (0.8%)	0.4% (1.0%)
M3S7 (Outlining paper's structure)	0.3% (0.7%)	1.0% (2.6%)	0.3% (0.9%)

Note. M3 = Move 3; S1 = Step 1; S2 = Step 2; S3 = Step 3; S4 = Step 4; S5 = Step 5; S6 = Step 6; S7 = Step 7; E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

When writing an introduction, writers face an inherent dilemma. If each move appears only once in the typical CARS model sequence with the long M1 appearing first, the reader must go through a significant portion of the introduction without a clear sense of the specific objectives of the research. One solution for writers is to cycle the moves so that a more general over-

view of the paper is provided initially with moves and steps repeated later as the paper's focus narrows. This strategy of cycling moves, generally as a telescoping strategy to proceed from the general to the specific, was employed in all three subcorpora as can be seen in Table 8. In the table, the total number of move tokens represents the number of moves that are preceded, followed, or both by a different move. For example, an introduction in which M3 occurred first and was followed by M1, M2, and then a recurring M3 would be said to have a total of four move tokens. The total step tokens likewise represent the number of steps preceded, followed, or both by a different step.

Although there was considerable variation, the initial move was almost always M1 and the final move M3. The 2004 CARS model incorporates the idea of cycling M1 and M2, but many papers also included an early M3 informing the reader of the paper's general aim, which was then restated in more detail at the end of the introduction.

Table 8. Amount of Cycling in the Three Subcorpora (Total Tokens Including Recurring)

Move or step	E-RAs (n = 25)	J-RAs (n = 25)	JE-RAs (n = 25)
	M (*SD*)	M (*SD*)	M (*SD*)
Move tokens	8.0 (3.8)	8.4 (4.9)	7.0 (3.9)
Step tokens	9.7 (3.4)	9.8 (5.5)	9.0 (4.8)

Note. E-RAs = research articles written by English-L1 authors; J-RAs = research articles written in Japanese by Japanese authors; JE-RAs = research articles written in English by Japanese authors.

A one-way ANOVA was conducted to examine the differences in the number of move tokens in the three subcorpora. Analysis revealed that at an alpha level of p = .05, the differences between the subcorpora were nonsignificant, $F(2,72)$ = 0.7, p = .507. Another one-way ANOVA was conducted to examine the differences in the number of step tokens. Again, analysis revealed that at an alpha level of p = .05, the differences between the subcorpora were nonsignificant, $F(2,72)$ = 0.2, p = .807. H[4] and H[5] were thus unsupported.

Discussion

Viewed broadly, this study suggests that Japanese scholars writing in both Japanese and English currently structure RA introductions in applied lin-

guistics in much the same way as their English-L1 counterparts. The re-
search revealed only minor differences between the three subcorpora, such
as the greater tendency for both English-L1 authors and Japanese authors
writing in English (relative to Japanese authors writing in Japanese) to
explicitly state research questions and hypotheses. Sheldon (2011), in an
examination of applied linguistics RAs, similarly found greater use of M3S2
among English-L1 writers, but in her study, Spanish authors used M3S2 less
in both Spanish and English RAs. In the current study, another minor differ-
ence between the subcorpora was that the Japanese-authored RAs showed a
greater tendency to begin the introduction with M3 or occasionally with M2.
It could be that Japanese writers, who have often undergone intensive train-
ing in English essay writing, are influenced by admonitions in pedagogical
materials regarding the importance of stating one's position "early on in the
paper" (for a typical example, see Weida & Stolley, 2013).

In earlier contrastive rhetoric research, there was speculation that Japa-
nese writers of academic English might be heavily influenced by Japanese
rhetorical structures, particularly the *ki-sho-ten-ketsu* (introduction, devel-
opment, abrupt topic shift, and conclusion) pattern (Hinds, 1983). Later
researchers (e.g., Kubota, 1997) have questioned this assumption. Although
some more recent research written in the past two decades (e.g., Oi, 1999)
has continued to find different rhetorical organization in the argumentation
patterns of native English and native Japanese writers, other research (e.g.,
Hirose, 2003) has identified many similarities. The current study suggests
that at least for the applied linguistics field and the area of introductions,
academic writing styles are converging. Other researchers (e.g., Kowalski,
2014, examining Polish RAs in linguistics) have also reported a trend for
non-Anglophone writing to converge toward English RA rhetorical norms.

A key finding in previous research was that M2 was often missing from
the introductions of many non-English RAs. The current research finds no
evidence for this in Japanese. It has also been said that non-English writers,
especially Asian writers, tend to avoid critiquing specific authors in M2. The
current study suggests that this avoidance is, in fact, the norm in applied
linguistics for both Japanese authors writing in either Japanese or English
and for English-L1 authors. In fact, authors in all three subcorpora gener-
ally avoided the critiquing of specific authors, and even when they put forth
critical remarks, they employed a wide range of stylistic devices to downplay
the face-threatening nature of their critiques. Generally speaking, critiques
of specific authors were mitigated by one or more of the following strate-
gies: (a) offsetting of the critique with praise, for example, by noting how

the critiqued author's contribution spurred progress in the field; (b) mentioning outstanding questions instead of directly focusing on shortcomings in previous work; (c) including critiques of one's own previous research; (d) distancing the critique of the author's idea from the actual mention of the author earlier in the paper; and (e) diffusing the personal nature of the critique by critiquing more than one author or by stating that the critiqued authors are examples of an undesirable trend associated with multiple authors in previous research.

One of the more unexpected findings in the current study was the prevalence of the cycling of moves. In this respect, the findings differ in some important ways from those of Ochi (2004), who found less use of cycling. This may be related to the disciplines investigated (in the Ochi study, biology, medicine, and physics). The RAs analyzed in Ochi's study were published at an earlier time, but it seems unlikely that greater cycling in the current study reflects changes in rhetorical practices among Japanese writers over the course of a single decade.

One factor that may explain the homogeneity in introductions across the three subcorpora is the nature of applied linguistics. Many of the Japanese scholars writing in Japanese were probably trained in English-speaking countries. Even if educated in Japan, much of the key literature in the field is written in English, so these scholars' reading of RAs in graduate school would have included heavy exposure to RAs written in English. For this reason, caution is warranted when generalizing these findings to Japanese-authored RAs in other disciplines.

The results have some clear pedagogical implications. First and foremost, the occasionally encountered advice that nonnative students learning to write about research in English must overcome their qualms about harshly criticizing previous researchers would appear to be misguided. The current research suggests, at the very least, that harsh critiques are not common in some disciplines. More importantly, students who venture to offer critical comments must be introduced to the diverse and subtle rhetorical means used to soften the tone of their critiques. The use of offsetting praise is one such strategy that is easy to convey to students. Other, more indirect strategies, such as directing of criticism at a tendency in the research may be more difficult to teach. Even so, instructors focusing on English research writing may want to do more to make students aware of some of these stylistic options.

The research also suggests that at least for Japanese students, the greatest obstacle to mastering English research writing might not be interference from L1 rhetorical practices. If this is the case, pedagogy, instead of focusing

predominantly on cultural differences, may more fruitfully draw attention to rhetorical structures in research writing and on how these structures are realized linguistically in the L2 within specific disciplines (for an example focusing on M2 in management, see Lim, 2012). In light of the considerable variation across disciplines observed in previous research, instruction aimed at students entering different fields may also need to introduce some of the abstract concepts associated with genre analysis, which students can then use as they examine and reflect on rhetorical practices in their own field. When introducing research writing to homogeneous classes of students entering the same discipline, instruction and pedagogical materials should ideally be more closely tailored to the specific practices of the discipline (for an example, see the description of M2 in discrete mathematics in Moghaddasi & Graves, 2017).

The current research has a number of limitations. The tallying of rhetorical features is likely to miss some of the subtle differences among the subcorpora. In some cases, such as the adoption of an adversarial stance toward previous researchers, qualitative assessments of the stylistic devices employed by writers may yield more insights than the quantitative measures used in the present study. Furthermore, an analysis of written products cannot provide direct insights into the decision processes of writers. It could be, for example, that nonnative writers modify their texts significantly based on feedback from native proofreaders and article reviewers.

Future research needs to address several remaining issues. At the more general level, decades of cross-linguistic comparisons and examination of specific disciplines have produced the needed groundwork for more general descriptions of RA introductions in a number of fields. Broad comparisons of findings are needed to establish which variables (e.g., discipline, language of the text, individual, and idiosyncratic differences) are more predictive of rhetorical differences (see Dahl, 2004). Moreover, because cycling of moves is a prevalent strategy in many introductions, more research needs to examine and classify such strategies with attention to the purposes of cycling within texts. At the same time, more research needs to be conducted on the learning processes associated with rhetorical structures in writing along with related research on the effectiveness of various pedagogical interventions. Finally, caution is warranted when making blanket characterizations of Asian cultural values and the way these values influence writing (Kubota, 1997). Academic research occurs within a dynamic international setting in which collaboration and interaction are the norm, so we may expect to witness increasing convergence in the practices of academic writers in the future.

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Appendix A
List of Articles in the English Subcorpus (E-RAs)

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Appendix B
List of Articles in the Japanese Subcorpus (J-RAs)

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Appendix C: *List of Articles in the Japanese-Authored English Subcorpus (JE-RAs)*

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