Innovations in structuring article introductions: The case of Applied Linguistics

Ling Lin
Hong Kong Polytechnic University (China)
kathycarly920@gmail.com

Abstract

This study explores the rhetorical structure of introductions that are followed by an independent Literature Review (L) section. It is motivated by an increasing use or even the prevalent use of both the introduction and L sections in the opening phase of empirical research articles in many disciplines and the lack of systematic genre-based investigation of introductions with a following L section. Based on a detailed examination of 30 introductions with a subsequent L section in Applied Linguistics, this study found that they generally can be classified into two categories according to their communicative functions and structures. They are the traditional CARS type that largely follows the classic "Create a Research Space" (CARS) model and the innovative Two-move Orientation type. Some featured elements used in the introductions with a subsequent L are identified and the "Two-move Orientation" approach is formulated for the rhetorical structure of this new type of introductions. The interesting links between introduction and L are also suggested. The study contributes to our understanding of the structure and function of this important part-genre in a new generic context (that is, introductions being followed by an independent L section) and illuminates the current genre-based teaching of introduction writing.

Keywords: introductions, research articles, rhetorical structure, genre.

Resumen

Innovaciones en las estructuración de las introducciones de artículos de investigación: el caso de la Lingüística Aplicada

En el presente trabajo se estudia la estructura retórica de las introducciones que preceden a la sección de revisión bibliográfica (B) en un artículo de investigación.

Su motivación radica en un uso incrementado o incluso la prevalencia de secciones de introducción o secciones B en la fase de apertura de un artículo de investigación empírica en muchas disciplinas, así como la falta de investigaciones sistemáticas basadas en los géneros en torno a las introducciones que preceden a una sección B. Partiendo del examen pormenorizado de 30 introducciones con sus secciones B subsiguientes y pertenecientes a artículos de investigación en Lingüística Aplicada, este trabajo ha constatado que existe una clasificación general en dos categorías conforme a las funciones y estructuras comunicativas. Suelen basarse en el modelo CARS ("creación de un espacio de investigación" en sus siglas en inglés) y, de forma innovadora, registrar dos movimientos. Se señalan algunas características utilizadas y se formula el enfoque de una "orientación hacia dos movimientos" para la estructura retórica de este nuevo tipo de introducciones. Se sugiere, además, las existencia de vínculos interesantes entre las secciones de introducción y B. Este estudio sirve para comprender mejor la estructura y la función de esta parte importante del género del artículo de investigación en un nuevo contexto (como son las introducciones que predicen a una sección B independiente); pero, además, sirve para arrojar una luz sobre la enseñanza de la redacción de introducciones conforme al género en el que se encuentran.

Palabras clave: introducciones, artículos de investigación, estructura retórica, género.

1. Introduction

Increasing awareness and concern about the growing use of English as an academic lingua franca (Ferguson, 2007) and the long-term dominance of Anglo-American discursive norms in the publication world has given rise to a substantial body of research on various aspects of the genre of English research articles (RAs), e.g., its macro-structure, the rhetorical organization of its major sections, to name just a few. Regarding the macro-structure of the RA, the classic Introduction-Method-Results-Discussion (IMRD) model determines that there are four major sections in a "conventional" empirical article (namely, the Introduction, Method, Results and Discussion sections) with the Introduction as the only single section in its opening phase.

Given the important position and pivotal role of the Introduction section, its rhetorical structure has in the past three decades attracted considerable scholarly attention, whose major focuses concern its variations across disciplines (Samraj, 2002), sub-disciplines (Ozturk, 2007) and cultures (Lee, 2001; Hirano, 2009; Sheldon, 2011). A number of studies have also explored the interrelationship between the Introduction and other parts of the RA

such as abstracts in Samraj (2005). These studies mostly used Swales's (1990) influential "Create-a-Research-Space" (CARS) model and its revised version (Swales, 2004) as the basis of their analyses and generally validated the effectiveness of the models in accounting for the rhetorical structure of the introductions.

However, the existing studies either only studied introductions in the traditional IMRD context (Nwogu, 1997; Kanoksilapatham, 2005; Loi, 2010) or did not define clearly the generic context of the introductions they analyzed (Anthony, 1999; Samraj, 2002; Hirano, 2009) – that is to say, whether the introductions selected appeared as the only section in the opening phase of the RAs or they were used in combination with other sections before Method, such as the Literature Review (L) section (Lin & Evans, 2012; Pérez-Llantada, 2013). As such, they have not yet systematically studied the rhetorical structure of the introductions that are followed by an independent L section. This would seem to be an important omission, because the use of both introduction and L before Method has become a common practice in contemporary research writing in many disciplines (Yang & Allison, 2004; Kwan, Chan & Lam, 2012; Lin & Evans, 2012; Pérez-Llantada, 2013) and to what extent, if any, the introductions used before the L section differ structurally from the traditional ones, especially those studied in the IMRD context, remains unknown.

The importance of L and the prevalent use of the "new" type of introduction (that is, the introductions with a subsequent L) have been demonstrated by a recent comprehensive survey of the macro-organization of empirical RAs based on a large corpus of 780 RAs selected from the 2007 volume of prestigious journals from 39 disciplines in the fields of applied sciences, engineering, social sciences and humanities (Lin & Evans, 2012). This study shows that over half (51.7%) of the empirical RAs investigated employ both introduction and L sections in the opening phase. In many disciplines (such as electronic and information engineering, management and marketing, industrial and systems engineering), over 80% of the empirical RAs have used the L section between Introduction and Method. Analogous findings are yielded from Kwan, Chan and Lam (2012), who studied evaluations of prior scholarship in the L section of RAs in the two sub-fields of information systems. By defining the L section as the section(s) between the introduction and the methodology sections where previous literature is reviewed, they found that in the two source journals following a strong behavioral science research, 100% and 93.02% of the RAs published in them respectively have

used an L while in the other two respective journals that show a strong design science research paradigm, 82.86% and 92.43% of the RAs published in the specified period came with an L. Therefore, the L section is almost an obligatory part-genre of the RAs in this field. The use of the L section as an expanded RA constituent on the theme of the traditional IMRD is frequently found not only in traditional journal articles without the new online elements (research highlights, graphical abstracts, interactive graphs, embedded videos, hyperlinks) as support or enhancements, but also in the "article of the future" prototypes in disciplines such as business and palaeogeography, as reported in Pérez-Llantada (2013).

In view of the possible influences from the neighboring section on the structural movements and configurations of the introductions and the increasing use of the L section after the introductions documented in recent studies (Kwan, Chan & Lam, 2012; Lin & Evans, 2012; Pérez-Llantada, 2013), the rhetorical structure of the introduction section that is followed by a usually elaborate L section is an unexplored issue that merits systematic genre-based investigation. Perhaps due to this research gap and a lack of research-informed accounts on how to structure this kind of introductory phase consisting of both introduction and L in the current writing manuals and reference books, our student writers often feel baffled in this regard and pose questions like the following:

(1) Is there any difference between the introduction with a subsequent L and the stand-alone I without a following L in terms of their structures and functions? If yes, what is it?

(2) If the usually lengthy L section is used for reviewing previous literature, do we still need to review previous studies in introduction (as suggested by the classic CARS model)?

(3) Given that there is an additional section – L – used in the introductory phase, is there any connection between the introduction and L?

To bridge the research gap and facilitate our research writing teaching and training, these questions will be addressed by the present study. Another interesting question this study explores is whether the traditional CARS model (Swales, 1990 & 2004) is still applicable to account for the rhetorical organization of the introductions in a "new" generic context – that is, being followed by the L section.

To answer these questions, the current study conducted a genre-based structural analysis of 30 article introductions with a subsequent L in Applied Linguistics. The reason for choosing this discipline is that it is one of the many disciplines where research writers favor using both the introduction and L in the opening phase of the empirical RAs (see Lin & Evans, 2012). Through this analysis, significant findings have been obtained on the schematic structure and communicative function of the particular group of introductions with a following L section, including the identification of the two-move structure for the innovative Orientation-type introduction.

2. The study

2.1. Data collection

To accomplish the research aims, 30 RA introductions followed by an L in applied linguistics were collected. These introductions were all drawn from empirical RAs published in the 2011 volume of the following five high-impact journals: *English for Specific Purposes (ESP), Language Learning (LL), Applied Linguistics (AL), TESOL Quarterly (TQ),* and *Studies in Second Language Acquisition (SSLA).* Excluding the special issue where all published works were written on the same theme, which may possibly influence the rhetorical structure of the RAs, the present author searched for all the introductions that fulfil the selection criterion – being followed by a clearly distinguishable L section – from the remaining issues until the required number (namely, six) of the introductions were selected from each journal.

Among the 30 selected introductions, 14 are headed "Introduction" whereas as many as 16 are non-labeled. This is because most source journals such as *TQ, LL* and *SSLA* require their submitted manuscripts to follow the specifications of the APA Publication Manual (2010), which maintains that the introduction does not need to have a heading that labels it as introduction due to its clearly identifiable position in the article. All these introductions feature a clearly distinguishable L section employed after them. In this study, the L section refers to the section(s) placed between the Introduction and Method sections that provide varieties of "background" to the study such as the contextual, theoretical and methodological background (Lin & Evans, 2012). After these 30 introductions were collected, each of them was assigned a number, AL1 through AL30 for ease of reference. The next sub-section specifies the two stages of analysis.

2.2. Data analysis

2.2.1. Categorizing introductions

Before identifying the move structure of the genre, it is essential to understand the overall rhetorical purpose of the texts in the genre (Biber, Connor & Upton, 2007). With the help of an expert genre analyst who is an associate professor having conducted a wide range of Applied Linguistics research for many years, the researcher, after multiple careful readings of the introductions, discovered that a considerable number of them indeed do not function to create a research space for the study when they are followed by an L (see Table 1). They also exhibit very different schematic structures from those of the traditional introductions as suggested by the conventional CARS model. Therefore, based on their major communicative purposes, the 30 introductions were firstly classified into two groups: the traditional CARS group and the unconventional group consisting of introductions that are not CARS-like.

Categories of introductions	Traditional CARS	Orientation
No. of introductions	18 (60%)	11 (36.7%)
Ave. length per text (no. of words)	700.7	343
Proportion of the entire RA (%)	7.9	4.1

Table 1. Two major categories of introductions:
Their frequencies, average lengths and proportions in the full RAs.

As shown in Table 1, 18 out of the 30 introductions fall into the traditional CARS group, indicating that they are conventional introductions displaying a close affinity to the CARS model. Among the 12 unconventional introductions, there is one special case termed "Building on the Writer's Own Previous Research" while the other 11 consistently reflect a distinct two-move structure with their purposes of identifying an issue to be addressed and informing the readers of the about-to-be-presented research. For this distinct group of introductions, an innovative two-move structural model – the Two-move Orientation approach – was proposed to account for their rhetorical organization (see Appendix 1). This Two-move Orientation type and the traditional CARS type are the two dominant categories of introductions with a following L section identified in the present data. Thus, their systematic structural analysis was undertaken using the frameworks detailed in sections 2.2.2 and 3.2 respectively.

As for the only single introduction (AL 14) that is styled and structured very differently from the two major types, it is not suited for genre analysis. This unique case seems a "relaxed, story-telling" type that starts with introducing the present study and then recounts the author's whole research experience and process. In accounting for his research story, the author firstly stated what he had done on the topic previously, then pointed out the link of his previous study to the initial design of the present one, and finally described how he further reshaped his research design by integrating his observations and thoughts during the research process. The entire introduction as a self-narrative account is unlike the traditional argumentative CARS type, which usually emphasizes niche establishment and occupation. While this introduction shows that the study it reports builds on the writer's own previous research, in its subsequent L section, the writer did review numerous previous studies by others and point out the gaps to be filled by his study.

Corresponding to its special structure, this "Building on the Writer's Own Previous Research" introduction is stylistically featured by a strong authorial voice and the frequent use of the first person pronoun "I" (eleven times) and its accusative case "me". This special kind of introduction seems more likely constructed by disciplinary experts with adequate authority and substantial research experience on particular topics, which enable them to confidently show the readers that their studies are an accumulation of experience along particular research lines. Although there is only one introduction of this type identified in the present data and we do not know how frequently expert writers favor this type in other disciplines, it is still worth being described. The description of this introduction not only gives readers a sense of structural variability of the introductions with a following L in Applied Linguistics, but provides useful reference for the future similar research of a larger scale in other disciplines.

As displayed in Table 1, Orientation introductions are nearly half of the traditional CARS introductions both in terms of their length and their proportions in the whole articles. This could largely be explained by the different content elements and structural components in them, which is further discussed in Section 3.2.

2.2.2. Analyzing the structure of the two major types of introductions

A two-level rhetorical analysis (moves and sub-moves) was undertaken of the two dominant categories of introductions: the traditional CARS type and

the innovative Orientation type. In this study, moves are considered for "characterize[ing] a genre as prototypical rather than obligatory" (Lewin, Fine & Young, 2001: 36). Regarding move constituents, the reason for preferring "sub-moves" to the contrasting pair of concepts "steps" and "strategies" (Bhatia, 2001; Kwan, 2006) is that "sub-moves" is a more inclusive term that is more applicable to the present analysis, whereas "steps" predicts the obligatory nature of the move constituents that occur in a fixed sequence and "strategies" indicates the opposite. However, in referring to relevant previous studies, the original terms the authors used (like "steps" or "strategies") are retained.

Two other important principles were also adhered to: first, imperatives rather than gerunds and present principles were used to label the moves and sub-moves for foregrounding writers' actions, as practised in Stoller and Robinson (2013). Further, in the coding analysis, for a few sentences reflecting more than one rhetorical function, only the most salient one was considered (Ozturk, 2007; Del Saz-Rubio, 2011; Sheldon, 2011).

Swales's (1990 & 2004) CARS model was taken as a starting point for analyzing the 18 conventional CARS introductions. The move-level analysis is comparatively straightforward as the three moves of the model (namely, Move 1 "Establish a Territory"; Move 2 "Establish a Niche"; and Move 3 "Present the Present Work") were found prototypical in the present data (see section 3.1). However, the coding and analysis of the sub-moves is more taxing, as there are a variety of sub-moves identified, including the majority set out in Swales's two versions of the CARS model, two elements newly devised in this study (that is, Sub-move 3.3 "State Theoretical Frameworks/Positions" and Sub-move 3.6 "Indicate the Literature Review Content" presented in Appendix 2) and several others proposed in recent introduction studies (for example, Del Saz-Rubio, 2011). As such, the three major moves with all these identified move elements constitute an integrated CARS model (see Appendix 2) that served as the coding framework for analyzing the traditional CARS introductions.

As shown in Appendix 2, for the moves and sub-moves conceptually shared in Swales's two versions of the CARS model yet with different labels, their terms in the revised version were followed if they were present in the data. Therefore, for instance, Move 3 in the integrated CARS model is "Present the Present Work" rather than the metaphorical term "Occupy the Niche" used in the 1990 model.

With respect to the sub-moves, in his revised model Swales compressed all options in Move 1 into an exclusive broad category "Topic Generalization of Increasing Specificity", which is all-encompassing yet apparently overgeneralized and not helpful for identifying interesting strategies employed by the authors (Del Saz-Rubio, 2011; Sheldon, 2011). To overcome this limitation, this study followed Del Saz-Rubio (2011) in maintaining the separation of the three sub-moves "Claim Centrality" (S1.1), "Make Topic Generalizations of Increasing Specificity" (S1.2) and "Survey Items of Previous Research" (S1.3) while further classifying Sub-move 1.1 "Claim Centrality" into "Claim Importance in Research World" (S1.1a) and "Claim Importance in Real World" (S1.1b) (Samraj, 2002 & 2005).

Although some genre scholars such as Samraj (2002) and Kwan (2006) have noted the confusions about differentiating "Making Topic Generalizations" and "Reviewing Items of Previous Research", the two original steps within Move 1 in Swales's 1990 model, this analytical difficulty generally does not exist in this study. The instances of "Topic generalizations" in this study were mostly non-research phenomenon or practice description – see example (1) – and the summarized research state or established knowledge claims – see example (2) – with few cases being introductions of theoretical constructs/concepts – see example (3) – which could be attributed to the applied nature of the discipline (namely, Applied Linguistics) as well as the author's postponing of substantial reviews of research activities to the subsequent L.

(1) Advanced English for Academic Purposes (EAP) language learners encounter many challenges as they move through their education and begin producing academic written texts within their chosen discipline. (AL 19)

(2) *Research has shown that* the acquisition of second-language (SL) grammar and pragmatics differs for foreign language (FL) and SL contexts (Bardovi-Harlig & Dornyei, 1998; Kasper & Rose, 2002; Kasper & Schmidt, 1996...). (AL 1)

(3) ... the typological generalization called *the noun phrase accessibility hierarchy (NPAH; Keenan & Comrie, 1977)*, the systematic way in which languages differ with respect to the types of RCs they allow. (AL 2)

Concerning the sub-moves associated with niche establishments, in addition to the "negative" and "positive" warrants, "Suggest Implicitly

Inconsistencies Precluding Gap Signaling" newly devised in Del Saz-Rubio (2011) and having been alluded to as early as in Samraj (2002) was found in the present corpus, thus being incorporated into the integrated CARS model. The only instance of this sub-move is provided below:

> (4) ... *some recent studies that have investigated the issue of pragmatic and grammatical acquisition have found evidence in support of the hypothesis that* SL environments foster awareness of pragmatic appropriateness, whereas FL environments focus on grammatical accuracy (e.g., Bardovi-Harlig & Dornyei (...) *However, evidence has also been reported that* English FL (EFL) speakers showed a higher sensitivity to pragmatic errors than their English SL (ESL) counterparts (Niezgoda & Rover, 2001). These somewhat *controversial* findings in the existing research ... (AL1)

Within Move 3, Sub-moves 3.2, 3.4, 3.5 and 3.7 in the integrated CARS model were drawn from Swales's (1990 & 2004) CARS model. Sub-move 3.1 ("Announce Research Purposes, Focuses, Research Questions, or Hypotheses") is a combination of Step 1 ("Announcing Present Research Descriptively and/or Purposively") and Step 2 ("Presenting RQs or Hypotheses") of Move 3 in the revised CARS model. This combination practice performed by Kwan (2006) in her genre analysis of the Literature Review chapters of doctoral dissertations was found applicable to the present data analysis and was thus adopted. Two new special elements perhaps characterizing the discipline and the CARS introductions with a following L are "State Theoretical Frameworks/Positions" (S3.3) and "Inform the Literature Review Content" (S3.6), as illustrated in examples (5) and (6), respectively:

> (5) ... *it is argued throughout the present article* that not only are multiword expressions much more common than popularly assumed, but they are also difficult for readers to both accurately identify and decode – even when they only contain very common words. (AL18)

> (6) *Two areas of current literature will be reviewed.* First, the effect of practice on the acquisition of cognitive skills ... Second, the effects of time distribution ... (AL 26)

As for the innovative Orientation-type introduction, a Two-move Orientation approach (2.2.1) was postulated for their discourse structure

based on the general procedures for conducting a corpus-based move analysis expounded in Biber, Connor and Upton (2007), with the help of the expert genre analyst who has provided advice for the classification of introductions. As this new type of introductions is the focus of the present study, more explications and clarifications of its functions and structural components will be presented in Section 3.2.

After developing the integrated CARS model and the Two-move Orientation approach as coding protocols of the two major types of introductions through repeated pilot-coding exercises and substantial discussions with the expert genre analyst, the researcher used WinMax's QDA program (MaxQDA, 2012) to code all texts. A trained coder who is an Applied Linguistics PhD candidate coded independently six texts (around 33.3%) from the traditional CARS group and five texts (around 45.5%) from the innovative Two-move Orientation group for our inter-coder reliability check. Our agreement percentages all exceeded 86%, generally indicating the validity of and consistency in our coding and analysis. Any remaining few discrepancies were resolved through discussion, criteria checking and further clarification.

3. Results and discussion

3.1. The traditional CARS introductions

Previous studies have mostly confirmed the strong explanatory power of Swales's CARS model in that it is generally stable at the move level with modifications mainly suggested at the sub-move level by other genre scholars (for instance, Anthony, 1999; Samraj, 2002). In line with this, the three moves of the CARS model are found prototypical in the conventional CARS introductions in the present study, though only Move 1 is obligatory (see Table 2). This suggests that a noticeable number of introductions still bear a structural resemblance to the CARS model even when they are followed by a usually lengthy L section that could possibly take over some communicative roles originally performed by them.

Moves	Individual counts	No. of introductions with the move (%)
Move 1 Establish a territory	36	18 (100%)
Move 2 Establish a niche	30	16 (88.9%)
Move 3 Present the present study	22	17 (94.4%)

Table 2. Frequency counts of the three moves.

Only two out of the 18 CARS introductions (AL2, 30) have Move 2 missing while the only introduction without a Move 3 is AL 22, which is characterized with four consecutive alternations between Move 1 and Move 2 (see Table 3). Although a few introductions omit either Move 2 or Move 3, the repeated use of the three moves are common, as can be seen from their individual counts.

Observed patterns	No. of articles (%)	Examples
Introductions following Swales's CARS model		
1-2-3	4 (22.2)	AL1, 16, 17, 19
1-2-1-3	2 (11.1)	AL4, 25
1-2-1-2-3	2 (11.1)	AL18, 23
1-2-3-2-3	1 (5.6)	AL3
1-2-3-1-2-3	1 (5.6)	AL21
1-2-1-2-3-2-3	1 (5.6)	AL10
1-2-1-2-1-2-1-3	1 (5.6)	AL20
1-2-1-2-1-2-1-2	1 (5.6)	AL22
1-2-1-2-1-2-1-2-3	1 (5.6)	AL5
Introductions deviating from the strict Swales's CARS model		
1-3	2 (11.1)	AL2, 30
1-3-1-2-3	1 (5.6)	AL6
1-3-1-2-1-3	1 (5.6)	AL26
Total no. of RAs	18 (100)	

Table 3. Examples of the move configurations.

Table 3 summarizes the move structure of this group of introductions. Generally congruent with the findings reported in most previous introduction studies on a similar discipline or sub-discipline (like Ozturk (2007) on second language acquisition and second language writing; Hirano (2009) on English for specific purposes; and Lee (2001) on English education), this study found that a significant proportion (66.7%) of the CARS introductions involve cyclicity, mostly with the repetition of two – for example, 1-2-1-2-3 (AL 18, 23) – or three moves – for example, 1-2-1-2-3-2-3 (AL 10). However, the archetypal 1-2-3 structure is still the most common pattern and another three structures gaining prominence are 1-2-1-3, 1-2-1-2-3 and 1-3. As stated before, only two introductions do not contain a Move 2, suggesting the central role played by this core component in the conventional CARS introductions. Despite four introductions showing salient deviations from Swales's CARS model and the existence of varied move structures, all introductions commence with Move 1 and close with Move 3, except AL 22 comprising four alternations between Move 1 and Move 2, as aforementioned.

Figure 1 displays the frequency of sub-moves within each major move. Within Move 1, the generalization element (S1.2) is the only obligatory sub-move, suggesting the importance of providing general background knowledge and contextualizing the research study in general sense in the introductions used before L. As for reviewing specific research activities, this element is frequently moved to L and only used in just over half (55.6%) of the introductions. This contrasts with the obligatory nature of this element maintained in Swales (1990) and recorded in many follow-up structural analyses of the introductions without a subsequent L such as the introduction in the IMRD context studied in Kanoksilapatham (2005). Therefore, much less use of reviewing individual research items to establish the territory is a prominent feature of the introductions with a following L, even though they mainly reflect the communicative function and move structure of the CARS model.
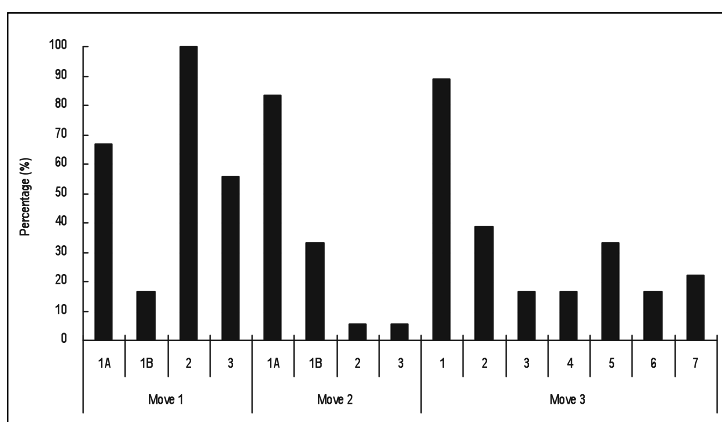

Figure 1. Sub-move frequency within moves in the traditional CARS introductions.

The following text excerpts illustrate typically how the author just referred to the previous studies by listing them in a non-integral citation (shown in italics) when summarizing the research state of the field in introduction – see example (7) – while reviewing at length and critically the cited studies by using a number of integral citations (see the italicized part) in the subsequent L section – see example (8):

(7) The few studies that have addressed unattended *this (Moskovit, 1983; Steinberg, Kaufer, & Geisler, 1984; Geisler et al., 1985)* have

focused on prescriptive uses and reader interpretations, with little empirical focus on the linguistic environment surrounding such structures. (AL 19)

(8) Few studies have focused specifically on the use of demonstratives in anaphoric reference and in relation to text cohesion. The studies that do exist primarily focus on the pronominal use, which may be a consequence of the prescriptive rules that exist. For example, *Moskovit (1983) seeks to* determine when pronominal *this* constitutes 'broad reference' (...) *Moskovit attempts to determine* when broad reference is unclear by examining 28 examples (...) *Steinberg et al. (1984) and Geisler et al. (1985)* question Moskovit's interpretations (...) Although *these early studies* offer a starting point, they focus on establishing prescriptivism, a practice which has in some circles fallen out of fashion. In addition, the research methodologies are problematic (...) Furthermore, these studies focus primarily on the use of pronominal *this*, and little (if any) attention is paid to demonstrative determiners ... (AL 19)

In the L section, the detailed review of the studies referred to in the preceding introduction establishes the link between the two sections and recreates the research space for the study. The linking of this sort is frequently found in the introductions with a following L, including the traditional CARS type and the Orientation type.

Regarding the two varieties of centrality claims, "Claim Importance in Research Word" (66.7%) is much more frequently employed than "Claim Importance in Real World" (16.7%). Although a similar tendency occurred in writers' choices of two gap-indication sub-moves (that is, research gap indication is far more favored), Sub-move 2.1b (33.3%) is still a prominent element, reflecting the great concerns of this discipline with real-world language-related problems. This could also be perceived from the frequently-cited definition of Applied Linguistics by Chris Brumfit (1995: 27):

[Applied Linguistics is] the theoretical and empirical investigation of real-world problems in which language is a central issue.

Both the "positive" warrant and Sub-move 2.3 are used in only one traditional CARS introduction. The only instance of the latter has been presented in Section 2.2.2. Of the seven variations realizing Move 3, Sub-

move 3.1 is most frequently employed (88.9%), followed by the method statement (38.9%) and the statement on announcing research significance (33.3%). As for the two new elements identified in the present study, Sub-move 3.3 and Sub-move 3.6 are respectively used in 16.7% of the introductions. Their degrees of importance need to be further examined by using a larger data set in this discipline.

Table 4 demonstrates the frequently-used sub-move configurations within each move. The fact that the number of the sub-moves integrating these patterns is either one or two and the most frequently used patterns for the three moves are all a single sub-move structure indicates that the traditional CARS introductions used before L are not densely structured. However, there are a wide range of choices in the combined use of different sub-moves within each move. Besides the patterns listed in Table 4, there are many more different patterns (for example, S2.1b+S2.1a for Move 2, S3.1+S3.5 for Move 3), suggesting that these introductions are flexibly structured at the sub-move level.

Move	Sub-move configuration	Count no.	% of intro
M1	S1.2 (Make topic generalizations of increasing specificity)	13	50
	S1.1a+S1.2 (Claim importance in research world+ Make topic generalizations of increasing specificity)	4	22.2
	S1.3 (Survey items of previous research)	3	16.7
	S1.2+S1.1a (Make topic generalizations of increasing specificity+ Claim importance in research world)	3	16.7
M2	S2.1a (Indicate a research gap)	22	72.2
	S2.1b (Indicate a problem or need in real world)	4	11.1
M3	S3.1 (Announce research purposes, focuses, research questions or hypotheses)	6	33.3

Table 4. Frequently-used sub-move configurations in the three moves (No. of occurrences ≥3).

3.2. Two-move Orientation introductions

Besides the classic CARS introductions, previous studies have identified other types of introductions with different structures, like the specific-general introductions in the Humanities and the problem-focused introductions in Law (Feak & Swales, 2011). In this study, an innovative type (namely, the Two-move Orientation introduction) is identified among the introductions with a following L.

As aforementioned, unlike the CARS introductions, Two-move Orientation introductions do not function to create a research space for the study but mainly to identify the issue to be addressed and inform the readers of the

research to be undertaken. They are essentially the brief, prologue-style introduction described in Lin & Evans (2012: 156). An example text of an Orientation-type introduction (AL9) is provided in Appendix 3.

The Two-move Orientation approach (Appendix 1) is formulated for the rhetorical structure of Orientation introductions. It contains two prototypical moves: Move 1 "Identify the Issue" and Move 2 "Present the Study". Move 2 is obligatory as it is used in all 11 Orientation introductions while Move 1 is present in ten of them as AL 15 is a single-move (namely, Move 2) introduction. Therefore, the two moves are essential in realizing the communicative functions of this type of introduction.

In terms of move configurations, after AL 15 containing only a Move 2 excluded, eight out of the other ten Orientation introductions follow strictly the canonical pattern "M1-M2". As for the other two introductions, AL7 (M1-M2-M1-M2) and AL 13 (M2-M1-M2) display the cyclical structure. In all, most of the new types of introductions displaying the two-move structure are regularly and simply structured at the move level.

The next two sub-sections detail the elements within the two moves. The same as in explicating the integrated CARS model, for the sub-moves that generally correspond to those in the CARS model, their definitions are not repeated due to space limitation.

3.2.1. Move 1 "Identify the issue"

In the Two-move Orientation approach, Move 1 is divided into three sub-moves. Sub-move 1.1 ("Survey Non-research Phenomena/Practices or General Knowledge Claims of the Field") shares mostly the propositional content and semantic attributes of Sub-move 1.2 "Make Topic Generalizations" in the traditional CARS model. The instances of this sub-move are commonly general statements on the research state of the field, explanations of the key theoretical constructs/ concepts, accounts of the general beliefs on the theme, or descriptions of the non-research phenomena or activities. In AL 9 (see Appendix 3 for detail), two segments illustrate this sub-move.

Generally, the element of the specific review of individual studies does not exist in this type of introductions and thus there is no difficulty in distinguishing Sub-move 1.1 and the specific literature review element. It is not surprising since this group of brief, prologue-style introductions simply

identifies the topic, purpose and structure of the paper and does not engage in a focused, gap-creating review of the literature, which has become a major task of the subsequent L (Lin & Evans, 2012). In this regard, AL 9 again provides a good example. It does not contain any review of previous studies on the theme (namely, the usefulness of imagery in the form of pictorial illustrations and etymological notes in idiom dictionaries), which is however included in the subsequent L. One extract from L illustrates this:

> (9) Extensive research *has been conducted by Boers and his colleagues* into the effects of mental imagery evoked by etymological elaboration (...) *Gallese and Lakoff (2005: 4) propose* that in order to understand a concept such as grasp (...) A positive influence of etymological elaboration on form and meaning retention *has been reported in Boers (2001)* (...)The question whether the strategy of etymological elaboration is equally effective (...) *is addressed by Boers et al. (2004a) (...) In Boers et al. (2008),* students' position on the verbalizer/imager continuum was correlated with their scores on the idiom comprehension ... (AL 9)

Owing to the absence of the detailed review of previous studies and the substantial niche-establishment move as well as much fewer complex recursive move patterns in these Orientation introductions, their length and proportions in the whole article are around a half of the conventional CARS introductions (see section 2.2.1).

Sub-move 1.2 ("Establish Importance of the Field") resembles the centrality-claim element in the CARS model. However, among the ten instances of this sub-move, only one establishes importance in the research world and the other nine do so in the real world, which contrasts with what is revealed in the traditional CARS introductions (3.1).

Sub-move 1.3 ("Suggest Value of the Issue") is the special element in this type of introductions. Although Orientation introductions do not have a substantial niche-establishment move for justifying the study, they often use one or two sentences concisely indicating the potential value of a research issue which is worth studying. Though this sub-move is absent in AL9 (see Appendix 3), an example is provided here to illustrate it:

> (10) ... the way in which raters assess lexis in writing *is an area which should be of interest to* a broad range of English language educators. (AL 13)

After suggesting the value of a research issue, for most of the cases the author immediately declares what he or she is going to do, hence this sub-move often being followed by Sub-move 2.1.
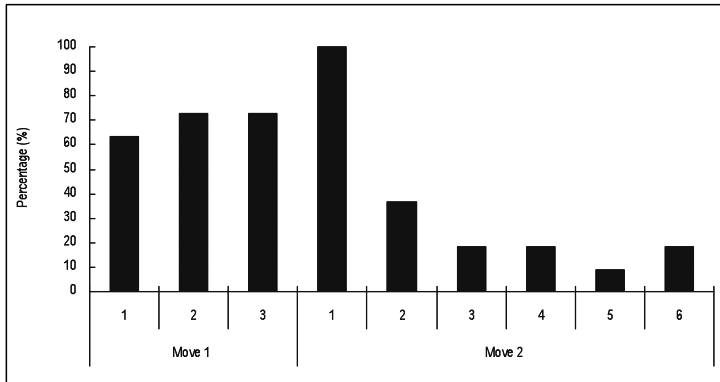

Figure 2. Sub-move frequency within moves in Two-move Orientation introductions.

The three sub-moves are prototypical constituents of Move 1 since they have been used in most of Orientation introductions (63.6%, 72.7% and 72.7% respectively) (see Figure 2). However, they co-occur in varied patterns and only AL 28 uses them in the canonical linear pattern of "1-2-3" (see Table 5); in nine out of the 11 Move 1 instances, the number of sub-moves integrating Move 1 is no more than three and only four Move 1 instances involve cyclicity. All these suggest that Move 1 structure of Orientation introductions is very flexible and irregular but not heavily information-loaded.

Observed sub-move patterns	Examples
Single sub-move	
Sub-move 3 only	AL7
Two sub-move configurations	
1-3	AL8, 27
1-2-1	AL9
1-2-1-2-1	AL7
2-1	AL29
2-3	AL11, 12
3-2-3	AL13
Three sub-move configurations	
1-2-3	AL28
1-2-1-2-3	AL24

Table 5. Different sub-move combinations within Move 1.

3.2.2. Move 2 "Present the study"

Move 2 comprises six sub-moves. Among them, four (S2.2, S2.3, S2.4 and S2.6) are the same as those in Swales's two versions of the CARS model. Sub-move 2.1 is formed by integrating Step 1 and Step 2 of Move 3 in the revised CARS model, following Kwan (2006). This is also the first sub-move for Move 3 in the traditional CARS introductions. The reason has been stated in section 3.1 and also applies here. Sub-move 2.5 ("Indicate the Literature Review Content") is a unique element found in the introductions with a following L. It is different from the element "Outlining the Paper", which indicates the content of each major part of the RA. Instead, it only suggests what will be presented in the forthcoming L section, as illustrated below:

> (11) The sections below review key theoretical concepts and various studies which have investigated creativity and language play for language learning. (AL 8)

The sub-moves for Move 2 in Orientation introductions is basically the same as those for Move 3 in the traditional CARS introductions except that the element "State Theoretical Frameworks/Positions" is absent in these much shorter Orientation-style introductions. The tendency in using sub-moves for presenting the study in Two-move Orientation introductions is also similar to that in the traditional CARS introductions: Sub-move 1 as an obligatory element is most frequently used, followed by the method statement (36.4%). All the other sub-moves are only used in a few introductions.

Sub-move combinations within Move 2 vary greatly (see Table 6). However, "Sub-move 1 only" is the most frequently used configuration and the number of sub-moves integrating this move in most of its instances is only one or two. These confirm again that the rhetorical structure of this type of introductions is generally flexible yet straightforward. In all 11 Orientation introductions, Sub-move 1 is invariably present despite the different sub-move combination patterns used within Move 2, which indicates the importance and prominence of this element. These frequently used patterns identified for the two moves further our understanding of this innovative type of introductions used before L and have high reference value for the teaching of introduction writing in EAP classrooms.

Observed sub-move patterns	Examples
Single sub-move	
Sub-move 1 only	AL7, 13, 24, 27, 28
Two sub-move configurations	
1-2	AL13, 29
1-4	AL12, 15
1-6	AL7, 9
Three sub-move configurations	
1-2-3	AL11
Four sub-move configurations	
1-3-2-5	AL8

Table 6. Different sub-move combinations within Move 2.

4. Conclusion

Compared to other genre-based introduction research, the present study is unique in its focus on the rhetorical organization of introductions that are followed by an independent L section in view of the increasing use or even the prevalent use of both introduction and L sections in the opening phase of empirical RAs in many disciplines (Kwan, Chan & Lam, 2012; Lin & Evans, 2012; Pérez-Llantada, 2013). The results reveal a discernible influence from the use of a subsequent L on the introductions both in the structural and functional terms. These introductions exhibit a mixture of rhetorical organizations in that 60% of them identified as the traditional CARS type display a close affinity to the CARS model while another significant proportion of them (around 37%), termed the Orientation type, consistently exhibit a two-move structure suggested in the Orientation approach simply to identify a research issue of potential value and to inform the readers of the research to be undertaken.

Although the traditional CARS group of introductions generally follow the CARS model at the move level, they manifest some special features characterizing their generic context (that is, being followed by an L) and the nature of the chosen discipline, like the use of the newly devised sub-moves "Indicate the Literature Review Content" and "State Theoretical Frameworks/Positions", and much less use of the element for reviewing specific research studies, which is often shifted to the subsequent L section. In Two-move Orientation introductions, the element for reviewing individual research items is even absent. They do not have the substantial "niche-establishment" move either as they do not intend to create a research space for the study based on a focused, gap-creating literature review.

Instead, they employ the featured elements "Suggest value of the issue" and "Indicate the Literature Review content".

The two major types of the introductions identified differ in terms of their lengths, functions and structures. In addition to the differences indicated above, at the move level, the traditional CARS introductions are much more complexly structured for involving much cyclicity while most Two-move Orientation introductions are regularly and straightforwardly structured. At the sub-move level, they are both flexibly yet simply structured with no dense use of elements. Because of their different structural components, communicative functions and content elements involved, Two-move Orientation introductions are generally much shorter than the traditional CARS introductions.

All these revealing findings and the interesting links between introduction and L suggested in this paper are illuminating and valuable to the genre-based teaching of article introduction writing given that there is currently a lack of published advice on how to construct the introductions used before L and the possible similarities and differences between this kind of introduction and the traditional introductions without a following L, like those in the IMRD context. Our student writers, especially those coming from the disciplines where the use of both introduction and L in the opening phase of the RAs is favoured, need to be made aware of the structural variability of the introductions, the special features the introductions with a subsequent L exhibit, and the possible logical links between introduction and L.

This study only focuses on a single discipline (that is, Applied Linguistics); therefore, future research could extend the present study by studying introductions with a subsequent L in many other disciplines to assess the newly proposed Two-move Orientation approach and to examine the possible cross-disciplinary variations in structuring this particular group of introductions. More insights are needed into disciplinary practices in arranging propositional contents and functional elements respectively in the two adjoining sections – namely, the introduction and L sections.

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Ling Lin is undertaking a doctoral degree in Applied Linguistics at The Hong Kong Polytechnic University. Her primary research interests include English for academic and professional purposes, discourse analysis and corpus linguistics. She has recently published several articles on research writing in *English for Specific Purposes* and *The Asian ESP Journal.*

Appendix 1: The two-move orientation approach

MOVE 1	IDENTIFY THE ISSUE
Sub-move 1.1	Survey the non-research phenomena/practices or general knowledge claims of the field
Sub-move 1.2	Establish importance of the field
Sub-move 1.3	Suggest value of the issue
MOVE 2	PRESENT THE STUDY
Sub-move 2.1	Announce research purposes, focuses, research questions, or hypotheses
Sub-move 2.2	Summarize research methods
Sub-move 2.3	Preview main findings
Sub-move 2.4	State the significance of the present research
Sub-move 2.5	Indicate the Literature Review content
Sub-move 2.6	Outline the article structure

Appendix 2: The integrated CARS model

MOVE 1	ESTABLISH A TERRITORY
Sub-move 1.1	Claim centrality
	1.1a Claim importance in research world
	1.1b Claim importance in real world
Sub-move 1.2	Make topic generalizations of increasing specificity
Sub-move 1.3	Survey items of previous research
MOVE 2	ESTABLISH A NICHE
Sub-move 2.1	Indicate a gap
	2.1a Indicate a gap in research
	2.1b Indicate a problem or need in real world
Sub-move 2.2	Present positive justifications
Sub-move 2.3	Suggest implicitly inconsistencies precluding gap signaling
MOVE 3	PRESENT THE PRESENT WORK
Sub-move 3.1	Announce research purposes, focuses, research questions, or hypotheses
Sub-move 3.2	Summarize research methods
Sub-move 3.3	State theoretical frameworks/ positions
Sub-move 3.4	Preview main findings
Sub-move 3.5	State the significance of the present research
Sub-move 3.6	Indicate the Literature Review content
Sub-move 3.7	Outline the article structure

Appendix 3: AL9 as an analysis example of two-move orientation introductions

To show clearly how the move and sub-move analysis is conducted, the text is not paragraphed as its original version but rearranged according to different sub-move units. To facilitate readers' understanding, some sub-moves are signaled as shown in the bold part below.

1.1 Idiomatic expressions, with their colourful literal meaning, seem to lend themselves perfectly to a graphical presentation.

1.2 Popular ELT books (Watcyn-Jones 1990; Hancock 1992; Milton and Evans 1998; Wright 2002) have capitalized on this characteristic **for a long time** now, and a few idioms dictionaries (OID2, CID2) **follow suit**. **More interestingly**, the new editions of idioms dictionaries (CCID2, CID2, OID2) supply some of their entries with brief etymological notes.

1.1 Both methods——pictures and etymology——evoke mental imagery (as defined in Lakoff 1987), and can be treated as an application, or a reflection, of the cognitive linguistic (henceforth CL) views on idiomaticity.

2.1 **In this article, we investigate** 'imagery' in the sense of verbal and non-verbal elements (here, in the form of etymological information and pictures) that may stimulate the formation of conventional images (Lakoff 1987: 446-447) associated with the literal readings of idioms.

2.6 In order to assess the merits of placing illustrations and etymological notes next to traditional explanations of idioms, one needs to consider the findings in at least three fields: (i) idiom semantics from the CL perspective; (ii) the effect of motivating information on idiom acquisition; (iii) the role of visuals and etymology in pedagogical lexicography. Additional useful insights can be gained from research into picture perception and memory models. These issues will structure the selective overview of the literature in the first part of the article; the empirical part reports on the results of an experiment, which is an attempt to answer questions addressing the role of imagery in dictionaries of idioms.