### RHETORICAL FRAMEWORKS IN MOVE ANALYSIS

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## **ABSTRACT**

Swales's (1990) seminal work on the rhetorical structure of the Introduction section of research articles has inspired a multitude of studies describing the moves that researchers in different disciplines make in their research papers. These frameworks of moves share many features but also vary to differing degrees, mainly in the levels of abstraction and conceptualisation. This paper examines some of the most comprehensive frameworks and explores their similarities and differences. Results from this analysis have important implications for future move-based research.

**Keywords:** Rhetorical structure; frameworks of moves and steps; move analysis; genre analysis.

### INTRODUCTION

In his seminar work on genre analysis, Swales (1990) conceptualises the structure of the Introduction as a series of moves and their constituent steps, defined as rhetorical units that together perform the coherent communicative function(s) of the section. Swales's (1990) conceptual framework has laid a foundation for a multitude of studies examining rhetorical structures of different genres, most extensively the research article (RA) genre and its individual sections.

Many of these studies develop their own frameworks of moves/steps (e.g., Brett, 1994; Lim, 2006; Nwogu, 1997; Pho, 2013; Stoller & Robinson, 2013; Yang & Allison, 2003), while others use existing rhetorical frameworks, and then validate these with their own data (Anthony, 1999; Basturkmen, 2009, 2012; dos Santos, 1996; Joseph et al., 2014; Lim, 2012; Musa et al., 2015). These frameworks apparently share many moves/steps as, for one thing, they are built on the basis of one another. On the other hand, these models may deviate from one another since they carry with them cultural contexts embedded within RAs being analysed. It is interesting to explore the ways in which and the extent to which these frameworks are similar or different, which will have several useful implications for future move-based research.

In this paper, I will revisit some existing frameworks of moves and steps, with particular attention to the use of move/step labels and the communicative functions attached to the moves/steps. This paper focuses on the Results, Discussion, and Conclusions section of RAs as an illustrating example. Three of the most commonly used and comprehensive frameworks are selected for the re-examination, including those by Yang and Allison (2003) for applied linguistics RAs, Pho (2013) for applied linguistics and educational technology RAs, and Kanoksilapatham (2003) for biochemical RAs.

# REVISITING THE EXISTING MODELS OF MOVES AND STEPS IN RESEARCH ARTICLES

Frameworks	Pho (2013)	Yang and Allison (2003)	Kanoksilapatham (2003)	Comparison zone
Disciplines	Applied linguistics and Educational technology	Applied linguistics	Biochemistry	
Section	Results/Results-Discussion	Results/Results-Discussion	Results	
Moves/steps	Move 11 Preparing for the presentation of the results section	Move 1 Preparatory information	Move 8 Procedural statement	A
	<sup>1.1</sup> Step 1 (Re)stating data collection and analysis procedure		1.5Step 1 Purposes/aims/objectives	
	<sup>1.2</sup> Step 2 (Re)stating research questions or hypothesis		<sup>1.2</sup> Step 2 Hypotheses restated	
	<sup>1.3</sup> Step 3 Giving background knowledge		<sup>1.2</sup> Step 3 Research questions	
	<sup>1.4</sup> Step 4 Indicating structure of the section		<sup>1.1</sup> Step 4 Procedures	
			Move 9 Methodological justification	
			<sup>1.3</sup> Step 1 Established knowledge of the topic	
			<sup>1.3</sup> Step 2 Previous literature	
	Move 12 Reporting specific/individual results	Move 2 Reporting results	Move 10 Statement of the results	В
			<sup>2.1</sup> Step 1 Substantiation of the result	
			<sup>2.2</sup> Step 2 Non-validation of the result	
	Move 13 Commenting on specific results	Move 3 Commenting on results	Move 11 Commentary statement	С
	$^{3.1}$ Step 1 Interpreting results	$^{3.1}\mathrm{Step}$ 1 Interpreting results	<sup>3.3</sup> Step 1 Explanation	
	<sup>3.2</sup> Step 2 Comparing results with literature	<sup>3.2</sup> Step 2 Comparing results with literature	<sup>3.1</sup> Step 2 Interpretation or generalisation	
	<sup>3.3</sup> Step 3 Accounting for results	<sup>3.4</sup> Step 3 Evaluating results	3.2,3.4Step 3 Evaluation and/or comparison	
	<sup>3.4</sup> Step 4 Evaluating results	<sup>3.3</sup> Step 4 Accounting for results	<sup>6</sup> Step 4 Suggested further studies	
			<sup>5.1</sup> Step 5 Limitation	
			<sup>4</sup> Step 6 Summary	
	<sup>4</sup> Move 14 Summarising results	<sup>4</sup> Move 4 Summarising results		
		Move 5 Evaluating the study		
		<sup>5.1</sup> Step 1 Indicating limitations		
		<sup>5.2</sup> Step 2 Indicating significance/advantage		
		<sup>6</sup> Move 6 Deductions from the research		
		<sup>6</sup> Step 1 Recommending		

further research

Section	Discussion- Conclusions/Conclusions	Discussion	Discussion	
Moves/steps	Move 15 Preparing for the presentation of the Discussion section	Move 1 Background information	Move 12 Contextualising the study	D
	<sup>7.1</sup> Step 1 (Re)stating data collection and analysis procedure		<sup>7,3</sup> Step 1 Established knowledge of the topic or citing previous research	
	<sup>7.2</sup> Step 2 Restating research questions or hypotheses		<sup>7.3</sup> Step 2 Generalisation, claims, deductions, and/or research gap made based on research literature	
	<sup>7.3</sup> Step 3 Giving background knowledge			
	$^{7.4}$ Step 4 Indicating the structure of the section			
	<sup>8</sup> Move 16 Summarising the study	<sup>9</sup> Move 2 Reporting results	Move 13 Consolidation of results	
	<sup>9</sup> Move 17 Highlighting overall research outcome	<sup>8</sup> Move 3 Summarising results	7.1,7.2Step 1 Methodology (purposes, research questions, hypotheses restated, and procedure)	
	Move 18 Discussing the findings of the study	Move 4 Commenting on results	<sup>9</sup> Step 2 Statement of finding	
	$^{10.1}\mathrm{Step}$ 1 Interpreting /discussing results	$^{10.1}\mathrm{Step}$ 1 Interpreting results	<sup>10.2</sup> Step 3 Reference to literature or comparison/contrast	
	<sup>10.2</sup> Step 2 Comparing results with literature	<sup>10.2</sup> Step 2 Comparing/Contrast results with literature	<sup>10.3</sup> Step 4 Explanation	
	<sup>10.3</sup> Step 3 Accounting for results	<sup>10.3</sup> Step 3 Accounting for results	oclaims and central claims, deduction, speculation, possibility, hypothesis, implication)	
		<sup>10.4</sup> Step 4 Evaluating results		
	<sup>11</sup> Move 19 Drawing conclusions of the study/stating research conclusion	<sup>11</sup> Move 5 Summarising the study		E
	Move 20 Evaluating the study	Move 6 Evaluating the study	Move 14 Limitation of the study	F
	<sup>12.1</sup> Step 1 indicating limitations	12.1Step 1 Indicating limitations	<sup>12.1</sup> Step 1 Limitations in findings	
	<sup>12.2</sup> Step 2 indicating significance	<sup>12.2</sup> Step 2 Indicating significance/advantage	<sup>12.3</sup> Step 2 Limitations in methodology	
		12.3Step 3 Evaluating methodology	<sup>12.1</sup> Step 3 Limitations in claims	
	Move 21 Deductions from the research	Move 7 Deducting from the research	<sup>13.2</sup> Move 15 Further research suggested	
	13.1Step 1 Making suggestions/drawing implications	<sup>13.1</sup> Step 1 Making suggestions		
	$^{13.2}$ Step 2 Recommending further research	<sup>13.2</sup> Step 2 Recommending further research		
		<sup>13.1</sup> Step 3 Drawing pedagogical implications		

# In the Results/Results-Discussion (R/RD) section Comparison zone A

Despite a clear difference in the label of the first move, the name suggests the same content: Prepare information for the presentation of results. A pronounced difference in this first move is the degree of specificity of the move (1.1-1.5). While there are no steps under this move in Yang and Allison's framework, Kanoksilapatham and Pho propose many steps which are similar in nature despite slight differences in sequence. It should be noted, however, that despite no mention of any steps under this move, the Preparatory information move in Yang and Allison's framework refers to all the steps mentioned in the other two frameworks, as is shown in the description about this move (Yang & Allison, 2003, pp. 373–374). Many steps proposed in Kanoksilapatham's framework (1.1; 1.2; 1.3) are included in Pho's. Two different steps: Established knowledge of the topic and Previous literature in Move 2 Methodological justification in Kanoksilapatham's framework are incorporated into one step: Step 3 Giving background knowledge in the first move of Pho's (1.3).

The final thing to note is that Pho's and Kanoksilapatham's frameworks both propose one new step that is not present in the other: Indicating structure of the section (1.4), and Purposes/aims/objectives (1.5), respectively. Nevertheless, it can be said from the example given in Pho's (2013) that Kanoksilapatham's Purposes/aims/objectives is included in Pho's step (Re)state research questions or hypotheses. Related to the Indicating structure of the section step is the notion of metatexts, which can be defined as texts about texts and are used to organise ideas and signpost the structure of a text. In her study into master theses, Jin (2016) identified three categories of metatext, including Thesis organisation (outlining the main content of theses), Announcement (providing an overview of a chapter or a section of the chapter) and Summary (summarising the contents and functions of a particular chapter) (pp. 58–59). A close examination of the examples provided in Jin's study reveals that the first category Thesis organisation can be seen to correspond to the Indicating the structure of the section step. The second category Announcement includes what is called Pointer (Brett, 1994). The third category Summary seems to be functionally equivalent to the Summarising the study move (Pho, 2013) in the D/DC section.

# Comparison zone B

There is an agreement on the communicative purpose of the second move in which the researcher reports specific results (Reporting specific/individual results – Reporting results – Statement of the results). However, in contrast with the other two frameworks, Kanoksilapatham's (2003) detailed this move with two steps: Step 1 Substantiation of the results (2.1) and Step 2 Non-validation of the results (2.2), which were first identified in Brett's (1994) study into the Results section of sociology articles. According to Brett's framework, the Substantiation of finding step is an additional discussion of the results produced by the other variable also analysed, which, as they do not produce significant results, serve to support or not conflict with the major finding presented before, and the Non-validation of finding step accounts for data and analysis of other variables that do not support the major finding (Brett, 1994, p. 53).

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# Comparison zone C

There is no variation in the name of the move — Commenting on results/Commenting on specific results/Commentary statement. However, while Pho seems to adopt Yang and Allison's, albeit with a slight difference in the step sequence (3.3; 3.4), the constituents of this move display differences as compared to Kanoksilapatham's framework.

Kanoksilapatham's model incorporates into one move many moves and their constituent steps in Pho's (3.1-3.4 and 4) and Yang and Allison's models (3.1-3.4; 4; 5.1 and 6). This integration can be justified by the fact that RA writers tend to indicate limitations to each specific result and then suggest what future research can do to tackle these limitations. Yang and Allison's (2003) study found that Reporting results and Commenting results are both obligatory in the Results section (p. 374), and crucial in conveying the main communicative function in this section.

Finally, Kanoksilapatham (2015) added one new step Exemplifying results under the Commentary statement move, in which writers present examples to provide direct support to or validate the move/step of statement of findings. In fact, Yang and Allison admitted that they did not present Exemplifying results as a separate move because this move can be retrieved from the context, and they therefore incorporated this move into the Reporting results move.

# In the Discussion/Discussion-Conclusions/Conclusions (D/DC/C) section Comparison zone D

The first move of the three frameworks associated with the D/DC/C section refers to a similar purpose: Provide background knowledge to prepare for the presentation of this section. However, there are similarities and differences between the three models.

Pho's framework for the first move is more specific than Yang and Allison's framework. There are similarities between Kanoksilapatham's and Pho's frameworks. The two steps in the first move in Kanoksilapatham's framework (Established knowledge of the topic or citing previous research and Generalisation, claims, deductions, and/or research gap made based on research literature) can be seen to be equivalent to the Giving background knowledge step in Pho's framework (7.3). In Basturkmen's (2012) framework, Give background knowledge also includes a 'self-promotional statement' (p. 138).

The first step of the second move in Kanoksilapatham's framework: Methodology (purposes, research questions, hypotheses restated, and procedure) is also incorporated into the first move of Pho's (7.1; 7.2). In addition to these similarities, Pho's framework proposes a new step in the first move: Indicating the structure of the section (7.4).

#### Comparison zone E

Main differences can be observed in the content and sequence of the next three moves. Pho's and Yang and Allison's frameworks both propose a move with the purpose of summarising results of the study (Summarising the study – Summarising results) (8), although it should be noted that Pho's Summarising the study move covers a wider variety of functions, such as reminding readers about the purpose of the study, which is not mentioned in Yang and

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Allison's model. This move is not present in Kanoksilapatham's (2003) framework, but is included as a step under the Consolidating results move in Kanoksilapatham's (2015).

Yang and Allison's framework also has the Summarising the study move (11), but this move expresses a different communicative function from what is suggested by Pho's Summarising the study move. Yang and Allison's Summarising the study move is more functionally equivalent to Pho's Drawing conclusions of the study move (11) when both of them are used to state the overall outcome of a study. There is no move with the same purpose in Kanoksilapatham's framework.

All the three frameworks include a move/step with the function of reporting results (9), and discussing the findings (10). However, while Pho, and Yang and Allison treat these (9 and 10) as separate moves, Kanoksilapatham incorporates them as steps (9; 10.1-10.3) into one move Consolidation of results. Yang and Allison proposes the Evaluating results step (10.4), which is not present in the others two frameworks.

# Comparison zone F

The last two moves in the D/DC/C section relate to the evaluations of the study (12.1-12.3) and deductions from the study (13.1-13.2). There are no major differences in the last two moves among the three frameworks. The only distinction is found in the degree of specificity. Yang and Allison's framework is more specific than Pho's in that general limitations (12.1) are distinguished from limitations of research methodology (12.3), an approach that is also adopted in Kanoksilapatham's (2003) model. Kanoksilapatham (2003) further categorises limitations into limitations in findings, in claims, and in methodology.

Similarly, Yang and Allison differentiate overall suggestions/implications from pedagogical implications, as they claim that making pedagogical implications is important in applied linguistics research articles. Pho's framework does not make such distinctions, incorporating these two steps under one step Making suggestions/Drawing implications (13.1). There is no move with the same function in Kanoksilapatham's (2003).

#### CONCLUDING REMARKS

The results from the comparison of the three frameworks show that these models are both similar and different to varying degrees. First, they share many communicative functions despite slight variation in the move/step labels. For example, the R/RD section in the three frameworks all carry the function of preparing for the presentation, reporting results, and commenting on results. Second, there are differences in the move/step sequence, elements of a move, and the specificity of a particular move, which may tie in with the disciplines of the RAs being examined.

What is of particular note here is pronounced differences in the move/step labels, and descriptions of the functions associated with the moves and steps. As has been shown, although Yang and Allison and Pho both use the label 'Summarising the study' in the D/DC/C section, it refers to different functions. An additional example is that the label 'Giving background knowledge' used in Yang and Allison's (2003) and Basturkmen's (2012) frameworks cover different scopes. Furthermore, despite no differences in communicative functions of 'Reporting results', 'Interpreting results', and 'Accounting for

results'/Explanations' in the three frameworks being examined here, the use of these labels in other frameworks in the literature refers to a different content. For instance, in Basturkmen's (2012) study into dentistry and applied linguistics RAs, 'Reporting results' might refer to reporting results and interpreting results (making claims and generalisations based on results), as is illustrated in one of the examples provided in her study (p. 140). It may be for this reason that the Interpreting results step is not present in Basturkmen's (2012) framework. An additional reason that she did not include the Interpreting results step in her framework is stated in her 2009 study. Basturkmen (2009) conflated 'Interpreting results' and 'Accounting for results' into 'Explaining results' because she found it difficult to differentiate these two steps, and also claimed that 'interpret' and 'account' are synonyms of 'explain' after consulting a dictionary (p. 245).

The variation in the ways of labelling a particular text segment with a move/step and lack of detailed explanations on the communicative functions performed by a particular move/step might pose many challenges to the reference that needs to be made to different studies in the literature, and further create confusion among readers and genre analysts. It is thus imperative that clarifications be provided to every move/step label in move analysis research. This is also of pedagogical importance in that a clear description of move/step structure with their elucidated functions will guide learners in the construction of moves and steps appropriate for the organisation of their texts.

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