

Generic Features of Social Science and Natural Science Thesis Introductions in Pakistani Context

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Abstract

The present study aims at identifying the generic features of Pakistani M. Phil thesis introduction section. For this purpose dataset of 40thesis introductions, broadly categorized under social science and natural sciences, has been compiled and analyzed. The center of attention of this study is introduction parts, specifically, of M. Phil thesis of natural sciences and social sciences at Government College University Faisalabad (GCUF). The present research has revealed macro structures (move analysis) of M. Phil theses introduction section. For the present study, the introduction parts of 40 M. Phil theses have been selected, 20 of them are from the social sciences and 20 are from natural sciences. Macro structures have been examined by using the CARS amended model proposed by Swales (2004). The results of analyses have revealed differences in terms of both the moves and step patterns in theses introductory part different disciplines.

Keywords: genre analysis, Pakistani thesis, Move analysis, sealed CARS model

1. Introduction

In the present era, English has become the lingua Franca to disseminate the academic knowledge. Researcher from across the world tend to broadcast their absolute knowledge in English so that it may attract larger audiences.

The field of genre analysis accounts for tremendous theoretical and practical changes in academic settings in the past two decades. Researcher in English for Specific Purpose (ESP) have conducted a host of studies on spoken and written genres in order to identify and analyse their major and minor structures. This trend in academic discourse has resulted in a substantial literature in English on a variety of academic genres such as abstracts, presentations, lectures, theses, dissertations, and research articles. The first genre-based analysis has introduced by John Swales in 1981. Swales (1981) have examined introduction sections of 48 English research articles. He has established a regular outline in the introduction sections of research articles in which he identified as the Four-Moves. Swales have asserted that article introductions have the organization which have a series of moves (parts) come into sight in an expected order. All moves consist of numerous steps. In 1990, Swales have presented a modified model which has three moves. Some critics give criticism that it was complex to make a distinction between Move 1 and Move 2 and in 2004 he has modified his model once more. Swales modified the original model again and again in the light of the insufficiency elevated by some authors and a novel modified and improved model come into view in 2004 (Swales, 2004, p. 226–232). Like other Asian countries, English has become the language of academia in Pakistan as well. Researcher, apart from English literature and linguistics, tends to produce their empirical knowledge in the English language to fulfill the communicative purpose and to attract larger communicative discourse community. However, a little attention has been given to genre analysis of academic writing, only a few researches have been conducted on the academic genre in Pakistan e.g. Shahzad (2012).

This study has explored macro structure (move analysis) of introduction section of M. Phil thesis of social sciences and natural sciences at Government college university of Faisalabad (GCUF). This study has examined genre specific features of thesis introductory section of natural sciences and social sciences. This research is limited as it is conducted on the data set of 40 introductory sections only. Nonetheless, this work is of pivotal importance because it can provide a roadmap for the prospective researches to conduct similar researches taking more data into account at the same time considering the discipline specific differences in M. Phil thesis introductory section.

1. Literature review

Genre refers to “abstract, socially recognized ways of using language” (Hyland, 2007, p. 149). In the past two decades, genre studies have been investigating rhetorical structures of various written academic genres. Miller (1984) defines “Genre” as recurrent social action that occurs in equally recurrent rhetorical situations within specific discourse communities. Swales (1990) articulates the concept of the genre as particular forms of discourse that feature a common structure, style, intended audience, and content and which are aimed at completing certain communicative functions.

Swales CARS model has been adopted by many studies to analyse the rhetorical structure in research article introductions, not only across disciplines, but also across languages and cultures. The best known and

most comprehensive work on Research Article introductions has been conducted by Swales (1981, 1990), who developed a model for investigating their rhetorical structure and the underlying motives of writers' rhetorical choices. Swales' model has been used with a great deal of success in the analysis of introductions in various academic disciplines in English.

Swales (1988) states that, 'genres are the properties of discourse communities' (p.211), that is to say, genres be in the right place to discourse communities, not to individuals, other kinds of grouping or to wider speech communities. In his landmark book, Swales (1990) states that discourse communities "are sociorhetorical networks that form in order to work toward sets of common goals" (p. 9). He explains 'discourse communities' as groups that have goals or purposes, and use communication to achieve these goals. One of the characteristics that established members possess in order to achieve those sets of goals is familiarity with the particular genres that are used to communicate among members.

Regarding the exclusive values of a discourse community it is, in practice, difficult to split one community from another (Canagarajah, 2002). This is due to the fact that communities are characterized by a varied set of values and discourses.

Based on this distinction, in the present study, the thesis used in the Social sciences corpus and those in the natural sciences corpus was the production of two groups of authors from two different discourse communities. The differences and similarities in terms of rhetorical move features reflect their rhetorical preferences in a written presentation.

2.2 Previous studies on thesis introduction

There are some intra-cultural studies undertaken to investigate the structure of MA or PhD thesis covering one or a range of disciplines.

Both Paltridge and Samraj investigated the overall organization of MA theses across multiple disciplinary fields. Despite so, the MA thesis writers in Paltridge's research were non-native English (or ESL, English as a second language) speakers while those in Samraj's study was native English (L1) speakers. Paltridge examined the overall organization of ESL PhD theses. Samraj, in contrast, further probed into the introductory sections in the L1 MA theses.

Samraj (2005) argues that "the results of previous studies on academic genres have been translated into pedagogical applications" (p. 153). Results of this study can be used for advanced level students practice master's and doctoral degrees. The results can be used for beginner researchers with the variations established in academic writing across unlike sub disciplines. Many Iranian researchers face problems in writing unique introductions due to their insufficient knowledge of generic structures this give the impression to be a sound reason to sensitize the local researchers to properly attend to this section in research articles.

Yin Ling Cheung (2012) has investigated rhetorical features of introductory chapter of a Master's thesis in soft sciences discipline by using swales CARS model. The mainly significant finding is that applied linguistics and education management theses seem to indicate a high student presence and high frequency of using non -integral citation, while instructional design and technology student writers demonstrate both low authorial presence and low occurrence of using non-integral citation.

In short these studies present variation in English in writing, and in unlike cultures and languages. These studies also presented variation in writing across field. It is expected that writers from dissimilar cultures and languages have their own privileged style of writing. Many factors have affected the writing style such as sociology, politics, culture, and many more. Additionally, Swales' model has been used efficiently to check the rhetorical structure of introduction section in a variety of languages and cultures.

English in Pakistan is one of the languages that have never been seeing the sights in this area. This present study has examined strategies of introducing M.phil thesis written in English by Pakistani authors by using swales moves analysis. In present analysis the CARS model has been selected because it has been widely applied by text analysts to study the introduction section across disciplines, across languages and cultures.

3. Methodology

This section includes details of the methodology used in the present study. Validity of the results of genre analysis depends on the methodology adopted for the study.

One of the central methodological issues for corpus-based studies is to make sure that the corpus chosen for analysis in fact represents the discourse area being studied (Biber, Connor, and Upton, 2007). The corpora used in the present study focus only on one particular text category.

3.1 Data selection

Data for this study was 40 introductions from M.phil theses written by Pakistani writers. 20 of them were from social sciences and the other 20 are from natural sciences. From different 10 disciplines, 5 from social sciences and 5 from natural sciences, researcher select the data and these disciplines are;

Table 3.1.description of data

Name of discipline [NS]	N o o f t h e s i s	Name of discipline [SS]	N o o f t h e s i s
B o t a n y	5	L i n g u i s t i c s	5
C h e m i s t r y	5	E n g l i s h l i t e r a t u r e	5
C l i n i c a l p s y c h o l o g y	3	E c o n o m i c s	3
z o o l o g y	3	S o c i o l o g y	4
p h a r m a c e u t i c s	4	L a w	3
	T o t a l = 2 0		T o t a l = 2 0

3.2 Instrument

The instrument in this study was Swales' (2004: 230-232) CARS model for the analysis and comparison of introduction sections of SS (social sciences) and NS (natural sciences) thesis introductions. The CARS model seems to be the most inclusive framework, and its previous description has been successfully and widely applied by researchers on introductions in different disciplines.

Some researchers have used different models to categorize the rhetorical moves in according to their beliefs about function of introduction section. Many studies have tested Swale's (2004) model in English language. Swalesian model (1990; 2004) has been evidenced by its wide use in literature (e.g., del Saz Rubio, 2011; Loi&Sweetnam Evans; 2010; Samraj, 2005, 2008; Sheldon, in press). This study adopted swales cars (2004) model to delineate the schematic structure of introduction sections.

In 2004, Swales revised some aspects of the 1990 version of the CARS model in line with the results of the research studies that make use of the 1990 version. Swales (2004) points out that in the 2004 version of Move 3 there are chances for the writers of research papers to develop upon the news value or interestingness of their work toward the end of their introductions.

Move 1 Establishing a territory (citations required) (obligatory)

Via

Step 1- Topic generalizations of increasing specificity (obligatory)

Move 2 establishing a niche (optional)(citation possible)

(Possible recycling of increasingly specific topics)

Via

Step1a- Indicating a gap in previous research (optional) or

Step1b-adding to what is known

Step2-presenting positive justifications (optional)

Move 3 presenting the present work (obligatory) (citations possible)

Via

Step 1- (obligatory) Announcing present research descriptively

And/or purposively possible

Step 2- (optional) Presenting RQs or hypotheses

Step 3- (optional) Definitional clarifications

Step 4- (optional) Summarizing methods

Step 5-(PISF) Announcing principle outcomes

Step 6- (PISF) Staging the value of present research

Step 7- (PISF) Outlining research

PISF: probable in some fields, but unlikely in others

CARS Model (Swales, 2004: 232).

Another model buntons model is also used and 4 steps are borrowed from this model. These steps were not present in swales 2004 model. These steps were NM3S1, NM2S1c, NM3S14 and NM3S12. After analysis researcher provide new tags to these steps.

To analyse the 40 selected texts, the researcher has used Swales's (2004) revised version of Swales' CARS (1990) model as an instrument. Swales' CARS model is based on the contemplation of academic writing, and Swale's (2004) comprise three moves: M1establishing a territory, M2 is establishing a niche and M3 presenting the present work.

3.3 Data procedure

Moves analysis was carried out by using swales cars model. Some researchers have used different models to categorize the rhetorical moves in according to their beliefs about function of introduction section. This study adopted swales cars (2004) model to delineate the schematic structure of introduction sections. For the intention of identification and easier access, all 40 theses from corpus were independently codified (LINGUISTIC-1, SOCIOLOGY-2 for social sciences corpus and ZOOLOGY-1, CHEMISTRY-2 for natural sciences corpus).

Sentence level analyses of move structure were carried out through the hand-tagged analyses. For

identification, all 40 theses from each corpus were individually codified with their disciplines name. First of all text files of thesis introduction were made by researcher. Then the web site *Compleat Lexical Tutor* was used to convert these text files into sentence units. Texts files were uploaded on *Sentence Extractor/T-Unit Calculator* on this web site one by one. The results of *Sentence Extractor/T-Unit Calculator* were pasted on *Microsoft Office Excel* sheets. After this process the data was tagged by researcher on sentence level. Analysis of move-step structure entails a certain degree of subjectivity that is possibly unavoidable when conducting text analysis studies. The occurrence of moves in thesis is recorded to authenticate the amount to which a particular move is used in our corpus. The criterion for justifying and classify the frequency of moves is defined. Moves having 100% occurrences were identified as obligatory. Moves having 90% occurrences were considered as conventional. Moves having least occurrences in representative data were labeled as optional.

The notion of communicative purpose was central to the analysis. For the rhetorical move-step structure, first the data were examined quantitatively by counting each instance of moves in both the data sets. Then, the function of each move was illustrated qualitatively.

For inter-rater reliability, another researcher was asked to identify the moves in both corpora as well. Other researcher had background in discourse and genre analysis studies. A comparison of two analyses yielded a high inter-reliability rate: 90 %. Then the discrepancies between our analyses were sorted out by discussion between us.

4. Results and Discussion

In this study, the first level of the analyses mainly focused on the hand-tagged move structure analysis of the two corpora within the framework of Swales' CARS Model (2004) was predominantly concerned with the discursal and rhetorical features of the two corpora.

4.1 Move Structure of the NS and the SS Introductions

The results are based on the identification of moves by using a modified model for thesis introduction.

The Move-Step Structure Analysis (Swales, 2004) have revealed that the three moves in the CARS Model, namely, M1, M2 and M3 has not been existed in almost the entire thesis (see table 4.1 and 4.2). 7 out of 20 thesis in the corpus of NS have move 2 and only one thesis of SS contained move 1. The frequencies of moves of the introduction sections of both social and natural sciences thesis have been found to observe the occurrence of each individual moves. The moves have further subdivided into multiple steps, because move deals with content in general terms while step is more specific in the treatment and organization of content. Table 4.1 and Table 4.2 show results of the detailed count of move analysis in the selected thesis introduction of both fields. The first column shows the code number of each introduction section. The second column refers to moves and their order found in each introduction and third column shows number of move units.

M1 represents establishing a territory

M2 represents establishing a niche

M3 presents presenting the present work

In 9 out of 20 thesis introduction of NS, all three of these moves existed. However, in SS sciences only 3 introductions contained all three of the moves. Specifically, the remaining 17 SS introductions did not contain a M2 (see table 4.2). Although the M1-M2-M3 was the common pattern in the NS introductions, other configurations such as M3-M1-M2, M1-M3, M1-M3-M1, also occurred.

Sequencing and cyclical patterns in SS and NS corpus

It is significant to pay focus on the sequencing and cyclical patterns of moves. Cyclical patterns give the concept to be usual feature in the Introduction section (Crookes, 1986; Hopkins & Dudley-Evans, 1988; Posteguillo, 1990). In terms of cyclical patterns normally formed throughout the Introduction, in present study there were noticeable variations between the NS and SS corpus.

Swales (1990) and Crookes (1986) assert that the length of the Introduction might have an effect on cyclicity. Longer Introduction has greater probability of cycling. Present study transmits doubt on this claim, since both longer and shorter Introductions displayed cyclicity. The main point is that regardless of the difference of length in the Introduction section, cyclicity is an effective discourse strategy. The reappearance of Move 1 is ascribed to the length of Introductions, here the frequent cycles of Move 1 indicate that contextualizing the research topic through revisiting previous studies to position the study in the discourse community are an important discourse feature in the Introduction section.

Seven out of 20 NS introductions in the corpus have the M1-M2-M3 move structure pattern. In the remaining 17 NS introductions, there was a variety of different combinations, which made it hard to identify other patterns of frequent use. For instance, the M1- M3 order occurred in 8 of the NS introductions and the M3-M1- M3 pattern has occurred three times in the NS introductions corpus.

As far as the SS introductions are concerned, M1-M3 pattern is the most commonly preferred combination. In 11 out of 20 of the introductions, this pattern is employed. In another 4 of SS introductions, this move structure existed in a cycled fashion, M1-M3-M1-M3 being the most frequent pattern with 4 instances of

occurrence.

Cycling of the moves is used by both NS and SS authors. In 17 out of 20 NS introductions, the three moves are cycled with a variety of different combinations. Similarly, in 12 out of 20 SS introductions, the moves are cycled.

In so far as the cycled move units are concerned, excluding CHEMISTRY-1 AND CHEMISTRY 3 as an exception with 12 move units, the number of move units in the NS introductions ranged between 3 to 9 move units. ZOOLOGY-1, PHARMACEUTICS-1 AND BOTANY 4 has only 2 move units. 5 disciplines have 3 move units. This value is 3 to 9 for the NS introductions. As for as, SS introductions are concerned, excluding English literature 2 and 5 as an exception of 10 and 13 move units, the number of move units in SS introductions ranges between 3 to 8. Sociology 1 and 2 has only two move units.

Move structure subject wise

If we look at the move structures subject wise, then we are able to know the similarities and differences of structure within a subject. In the subject of Sociology, two introduction sections have same move structure i.e. [M1-M3], while the rest of two have M1-M3-M1-M3 structure. However, the authors of English literature thesis are following same move structure in introduction to some extent. Three thesis introductions out of five have been sharing same move pattern i.e. [M3-M1-M2], while the rest of two introductions have M1-M3 pattern. Like sociology introduction 2 introductions of linguistics, two introductions of law and 2 introductions of economics share same pattern M1-M3. Linguistics and law introductions, like the subject of literature, are following a single move structure that is [M3-M1]. One introduction of linguistics and economics share same move pattern M1-M2-M3.

Out of 5 disciplines 4 disciplines of NS share same move pattern M1-M2-M3. Botany, chemistry, pharmaceuticals, and zoology introductions have been found sharing same move structure in each of the subject. 8 disciplines sharing same move pattern M1-M3. Chemistry-2 has M1-M3-M2 move structure and CHEMISTRY-4 have M3-M1-M2 MOVE pattern. In the subject of CLINICAL PSYCHOLOGY, two introduction sections have same move structure i.e. [M3-M1]. Now the move structures found in all subjects are discussed overall at the level of fields that are natural sciences and social sciences. The list of move structures found in both disciplines has been given below:

Table 4.1. Number of Move Structures found in both corpora

Discipline/Field	Move Structures
Social Sciences	M1-M3 M3-M1-M2 M3-M1 M1-M2-M3 <div style="text-align: right; border: 1px solid black; padding: 2px;">TOTAL 4</div>
Natural Sciences	M1-M2-M3 M1-M3 M3-M1 M3-M1-M2 <div style="text-align: right; border: 1px solid black; padding: 2px;">TOTAL 4</div>

A noticeable distinction has been observed in both corpora in relation to the move structures. Namely, the chronological pattern of the move structure (M1-M2-M3) was found only in natural sciences corpus and only 2 instances are present in social sciences.

The percentage and frequency of the occurrence of move throws light its status whether it is obligatory, conventional or optional in nature. Therefore, the following Table 4.1 has been drawn to identify the status of moves found in our study. After seeking guidance from literature, I have adopted following criterion to label the moves.

Moves having 100% occurrences are identified as obligatory.

Moves having 90% occurrences are considered as conventional.

Moves having least occurrences in representative data are labeled as optional.

The move analysis of SS and NS thesis introductions reflect the dominant rhetorical pattern of moves preferred by Pakistani researchers. The detailed description of distribution of moves in introduction sections of both disciplines is presented below in table; 4.4.

Table 4.2. Moves in introduction sections of both disciplines

Moves	Social sciences thesis [n=20]		Natural sciences thesis [n=20]	
	N	%	N	%
M1	20	100	20	100
M2	1	5	7	35
M3	19	95	16	80

Note 1.N= refers to the total number of analyzer thesis in this study

1. % refers to the frequency of occurrence of a move

Based on the analysis, three moves are present in the selected corpora and their frequencies of occurrence are different. According to its frequency, Move 1 is obligatory move in both datasets, having frequency of 100 % in both natural and social corpus. A noticeable difference is found between the frequency of Move 2 and Move 3%. The frequency of Move 3 is 95 % in social sciences and 80% in natural sciences. The frequency of move 2 is 5% in social sciences and 35% in natural sciences. Move 2 is optional for both natural sciences and social sciences corpus. Every culture has its own structure. Pakistani writers have their own optional, obligatory and conventional moves. When researcher compares these results with other studies they show different results. SS thesis introductions contained M1 (100%) and M3 (95%). Remaining SS introductions did not contain M2 (5%).

The moves found in both corpora have been presented in graph (Figure 4.1) which is given below.

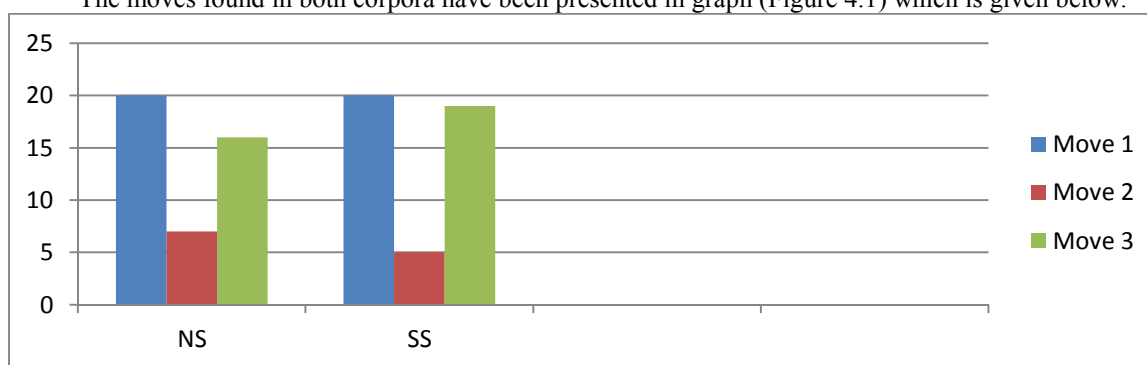


Figure 4.1. Moves in both corpora

ELVAN EDA ISIK TAS aims of study was to carry out a contrastive analysis of the genre-specific features of introductions of PhD thesis in But for present study researcher only compare results with PhD thesis introductions. Only less than half of the PhDT introductions, 11 out of 25, restricted to all three of the moves. Specifically, the remaining 14 PhDT introductions did not contain a M2. In Present corpus SS introductions have 5% occurrence of M2 while, phDT thesis introductions have 56% frequency of M2. In NS M2 occurred 35%. Both the corporuses of SS and NS show different results from phDT thesis introductions. Another study in which Yi-Min Chiu compare English and Chinese phD thesis introduction. Table 4.3 shows that Pakistani writers have different moves structure when we compare them with Yi-Min Chiu results.

Table 4.3. Comparison of occurrence of moves

English thesis Introduction (%)			Chinese thesis Introduction (%)			SS thesis Introduction (%)			NS thesis Introduction (%)		
M1	M2	M3	M1	M2	M3	M1	M2	M3	M1	M2	M3
41%	29%	30%	33%	24%	43%	100%	5%	95%	100%	35%	80%

Description of moves and steps

Now each move and step is illustrated and in examples from the original text is included.

Move 1 ‘Establish territory’

In the M1-M2-M3 pattern of the CARS Model, the authors establish territory (M1), claim importance by referring to other investigators and by given that citations. Move 1 ‘Establishing the territory’ frequently come about in the Introduction opening position. The main goal of Move 1 is to create the implication of the research field.

Writers using expression such as ‘Over the last two decades’, (Going back in time, the notion...) and ‘Over the last several years’ these writers skillfully revisited the history of their field of study, demonstrating the comprehensive record of active contribution in debating or denying theories. By drawing on supporting testimonies, these writers have inserted their studies into a broader historical research territory.

Examples

- **Economics-1**

Meanwhile in last few decades wheat was contributing a lot in revenue generation, to remove unemployment etc. because now advanced technologies were used in the production process as compared to previous years. By paying little attention productivity of wheat increased.

Move 2 “Establishing the niche”

In the second move (M2) of the M1-M2-M3 pattern, “establishing the niche”, the authors create a research space for their studies by either indicating a gap in their field of study (M2S1A), by adding to what is known (M2S1B) or by presenting positive justification for the approach in their own research study (M2S2). Step 2 in Move 2 “Presenting positive justification” is considered not obligatory in Swales (2004) model, but here has alike low numbers of occurrences across the two corpora. However, the results yielded useful specific disciplinary insights.

In both corpora, the second move (establishing the niche) M2S1A (indicating a gap) was occurred more time in NS corpus. S1a occurred 7 times in corpus of NS. The exercise of M2S1B (adding to what is known) was the dispreferred option in both corpora. In the same way, M2S2 (presenting positive justification) was preferred by only one authors of the SS introductions and 4 authors of NS used this step.

19 out of 20 introductions of SS did not contain a M2S1A (indicating a gap). As for as NS corpus is concerned 7 instances of M2 (indicating a gap) is present. Examples of M2S1a are given below for both corpora;

Examples of M2S1a [SS]

- **ECONOMICS-3**

Many researchers such as Ahmad in 1994, Khan and Iqbal in 1991 have been used budget deficit and interest rate as a variable to find out the effect of public expenditures on the private spending. According to them, negative association between interest rate and budget deficit favor crowding in hypothesis. While Haque and Montiel (1993) argued that positive correlation among budget deficit and interest rate support the crowding out hypothesis. However the above mechanism is not applied in Pakistan because there does not hold any significance relationship among private expenditures and interest rate in Pakistan.....

EXAMPLES OF M2S1a [NS]

- **BOTANY-5**

But only few studies are made to find out the effect of sugar mill effluent on growth and germination of different plants at different growth stages. Sugar factory waste water, when released into the environment, create a severe health risk to the rural and urban populations that uses stream and river water for agriculture and household purposes, there are several reports of fish death and harm to the rice crops in these areas due to waste waters entering agricultural land (Baruah et al. 1993)

Move 3 “Presenting the present work”

Move 3 “Presenting the present work” is characterized by presenting the research in question after the niche has been established in Move 2. In other words, Move 3 swiftly fills the gap identified in Move 2 by explicitly outlining the research purpose, stating its structure, main features and announcing the principal outcomes (Swales, 2004).

Moreover, in this move, they may present their research questions, hypotheses, clarify certain terms, announce principle outcomes, state the value of their research and outline the structure of the paper. However, as indicated by Swales (2004), these steps, except for “announcing the research descriptively” are optional. Move 3, Step 1 “Announcing present work descriptively and/or purposively” can be categorized as obligatory since it has been employed by all thesis introductions of NS and SS. The following examples illustrate this rhetorical move in the two corpora.

M3S1 ANNOUNCING PRESENT RESEARCH [SS]

- **LINGUISTICS-1**

The purpose of this research is to know about the status of English language and its importance among the Muslim religious scholars in Pakistan. The other purpose of research is to know the positive and negative attitudes of Muslim religious community toward the teaching and learning of English language. It would focus on understanding the very reasons behind these attitudes.

M3S1 ANNOUNCING PRESENT RESEARCH [NS]

- **BOTANY-5**

This study was carried out to determine the effect of sugarcane mills effluent on biochemical and physiological attributes of maize crop at different growth stages

Move 3, Step 2 “Presenting research questions or hypothesis” is used less than Step 1 by all disciplines. SS group had 11 instances, and the NS group had 1. SS group is clearer about what the researchers are examining or what they are doing. While, the writers in the NS group put greater importance on situating their research purposefully in Step 1 and appear resistant to delineation of the research question.

Examples of Step 2 are given below.

M3S2 [SS] Presenting research questions or hypothesis

- **LAW-2**

Hypothesis of the research work are as follows; H0: Political and social culture of Pakistan and India is strengthening women rights H1: Political and social culture of Pakistan and India is not strengthening women rights H2: Political and social culture of Pakistan and India is strengthening women rights but it is required to change the system

M3S2 [NS] Presenting research questions or hypothesis

- **CLINICAL PSYCHOLOGY-2**

Hypotheses H1.Motivation level will be positively related with self-esteem among subject specialists and lecturers.H2.Motivational level will be positively related with life satisfaction among subject specialists and lecturers.H3.Self-esteem will be positively related with life satisfaction among subject specialists and lecturers.H4.Male subject specialists and lecturers will score more on motivation level, self-esteem and life satisfaction than female subject specialists and lecturers.H5.....

M3S3 “definitional clarification ‘This step is used by only one thesis introduction of SS(ENGLISH LITERATURE-5). All other use this step in M1.

M3S3 [SS]

- **English Literature-5**

Working Definitions of Key Terms

The following key terms and concepts are functional key terms and concepts throughout my thesis which have shaped and supported me to understand my own research assumptions.....

STEP 4 “Summarizing method” is strongly represented in the SS thesis introductions by 7 instances and the NSintroductions by 2 instances.

M3S4 [NS]

- **CHEMISTRY-4**

The collected samples were stored and labeled in air tight new polyethylenetetrapthaete (PET) bottles in order to determine the level of toxicity and to analyse the water quality parameters such as TDS, TSS, chlorides, sulphides, pH, sulphates, COD and BOD.....

M3S4 [SS]

- **LINGUISTICS-2**

1.4 Methodology: The focus of my analysis is the first editorial response to the Osama Bin Laden’s killing by the U.S. in Abbotabad and PNS Mehran Attack in Karachi. The data collection for my research consisted of retrieving the first 5 days editorials after both the incidents from two Pakistani English newspapers Dailies, the Daily Dawn and the Daily Nation.....

Step 5 “announcing principle outcomes”

M3S5 [SS]

- **ECONOMICS-1**

The study results disclose that about 83 per cent of farmers equipped the land as suggested by experts. This survey found some major causes of failure of the wheat crop and stated that farmers become unable to sow the wheat at time for the purpose there should be the proper technology availability, sowing method rate of farmers is not according to the requirement so there also should be the proper technology for the efficient sowing operation and finally to improve the awareness about technologies (Mahmood& Sheikh)

Step 6 “Staging the value of the present research”

This step showsdissimilarity in the number of occurrences across the two groups. The less frequent representation of Step 6 in the NS (natural sciences) corpus may propose that they did not need to state the value of their research, perhaps because of having presented their work with determination in Step 1, where they make strong claims for the validity of their research.

M3S6 stating the value of present research [NS]

- **CLINICAL PSYCHOLOGY-2**

This will be very insightful pioneering work that will open future research possibilities in the area in understanding the problems that are emerging in teaching community and its role in both community’s teachers and students as well.....

M3S6 [SS] stating value of present research

- **LINGUISTICS-1**

Significance of the Study: During undertaking the research on English language in social and educational context of Pakistan, it was compulsory to know the attitudes of Muslim religious scholars toward the English language because they are an active part of our society and education system.

In regard to **Step 7 “Outlining the structure of the paper”**, the NS authors may have felt no pressure to announce the structure of their papers.8 Instancesare present in corpus of SS.

M3S7 outlining the structure of the paper [SS]

• ECONOMICS-3

This study is divided into five chapters. A brief discussion about the public investment and private investment has been given in chapter 1. Chapter 2 is providing the brief history of Pakistan's government spending and private consumption from 1947 to 2010. Previous studies which relate to investment are described in chapter 3.....

Overall, the SS thesis introduction more consistently used the seven steps of Move 3 than NS thesis introduction. The least common steps in SS corpus is S5 (announcing principle outcomes) labeled as PISF (probable in some fields, but unlikely in others) in the CARS Model. For NS introduction corpus S2, S5 and S7 are least common steps. In fact, except for S1 and S4 (summarizing methods), the other steps S2, S3, S5, S6 and S7 are used systematically neither in the NS introductions, nor in the SS introductions. However, it should be noted that only S1, S2, S6 and S7 are found to be a slightly more common option for the authors of the SS introductions.

The analysis also revealed that the authors of both corpora utilized the steps in the third move in a variety of combinations and configurations. Thus, a general pattern in the use of steps for the third move (presenting the present work) was hard to identify for the introductions analyzer in this study.

4.2 New moves adopted from the Bunton's (2004) model and revision of moves

16 out of 20 NS thesis introduction in the corpus have a new move which is previously not mentioned in CARS model (swales, 2004), as for as, SS thesis introductions are concerned 19 thesis have a new move.

The Move-Step Analysis (Swales, 2004) conducted so far confirmed Swales' (2004) description of the move structure for the NS and SS. However, Swales' CARS Model did not completely account for the NS and SS introductions analyzer in this study in several aspects, which resulted in the revision of the CARS Model to make it more compatible with the introductions. In the course of the revision, moves and steps with frequencies less than 20 (the total number of theses in the corpus) were regarded as "optional".

Move 1 establishing a territory

The first aspect subject to revision of additional step for Move 1 (establishing a territory). 8 out of 40 of the introductions contained definition of one or more terms in M1. In most cases, this definition was integrated into the first move regardless of the existence of a "definition of terms" section in the third move (presenting the present work). Only one thesis defined terms in M3 (presenting present work).

MOVE 2-ESTABLISHING A NICHE

In 3 out of 20 introductions of SS "The Problem" or "Problem Statement" or "Statement of the Problem" (M2S1b) occur.

EXAPLES OF M2S1b [NS]

ENGLISH LITERATURE 2

Research Statement According to Foucault there are ideological Spaces in Disney that blur the dichotomy of utopia/ heterotopias and thus invite readers to escape the fallen state of society and the self and create idealized visions of western capitalism and political history.....

Move 3-PRESENTING THE PRESENT WORK

The third move (presenting the present research) is also revised in a way to account for the steps that were preferred or dispreferred by the authors of the NS and SS introductions. There were mainly one steps that were non-existent in the NS introductions, but that were used in the SS introductions and one step mainly occur in both corpus. These were: delimitations [M3S8] and objectives aims and goals [M3S9]. These steps were added to the list of the PISF optional and steps in

Delimitations of the study were stated in 7 of the introductions of SS. Aims objectives and goals were stated in 16 introductions of NS and 19 times in SS introduction.

Examples of M3S8 of SS

LINGUISTICS-4

Metadiscourse is a broad area for research but due to the limitation of time and resources, this study is limited to the types of metadiscourse (personal and impersonal). The researcher restricted the data only to argumentative essays.

Examples M3S9 [NS]

BOTANY-6

following objectives: 1.To find out the appropriate dilution level for sugar mill effluent to use them as low cost fertilizers for cereal crops 2.To assess the various morphological, physiological and biochemical changes produced in shoots and roots under sugar mill effluent stress 3.To find out the tolerance levels of maize crop to sugar mill waste water at different growth stages i e Seedling, Silking and Grainfilling.

EXAMPLES M3S9 OF SS

ECONOMICS-3

Objectives of the study

The major objective of the study is to investigate the linkage between public investment and private investment in Pakistan (crowd in and crowd out effect or substitutability and complementary effect). However, the study will also empirically test the accelerator theory of investment as well as the neoclassical theory of investment in the context of Pakistan.

Lastly, M3S3, 7, 9 was totally removed from in the revised CARS Model (Swales, 2004) for the NS theses, since M3S5 step existed in only 2 of the analyzer introductions of SS.

After modifications in model now NM moves have these Tags;

Table 4.4. New tags given to NM

NS				SS			
NM2		NM3		NM2		NM3	
		NM3S1	M3S9	M2S1b	NM2S1C	NM3S1	M3S9
		NM3S12	M3S10			NM3S14	M3S8
-	-						

Figure 4.2. presents graphical presentation of Move 3 in NS and SS introductions which is given below.

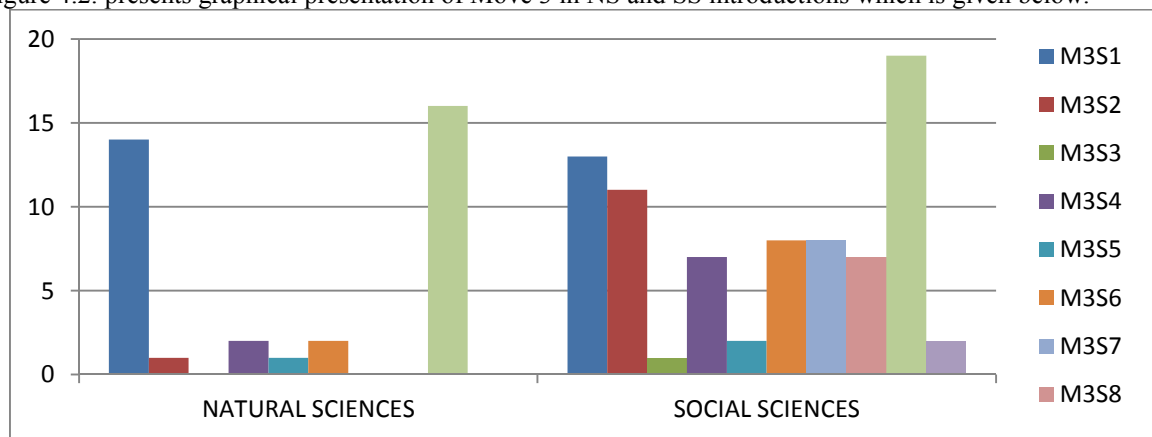


Figure 4.2. Presentation of M3 in NS and SS introductions

After modification swales model look like this;

Move 1 Establishing a territory (citations required) (obligatory)

Via

Step 1 Topic generalizations of increasing specificity (obligatory)

**Step 2 Definitional clarifications (optional)

Move 2 establishing a niche (optional)

Via

S1a Indicating a gap in previous research (optional)

S1b statement of the problem (optional) possible recycling of the moves

Step2-presenting positive justifications (optional)

Move 3 presenting the present work (obligatory) (citations possible)

Via

Step 1- (obligatory) Announcing present research descriptively

And/or purposively possible

Step 2- (optional) Presenting RQs or hypotheses

Step 3- (optional) Definitional clarifications

Step 4- (optional) Summarizing methods

Step 5-(PISF) Announcing principle outcomes

Step 6- (PISF) Staging the value of present research

Step 7- (PISF) Outlining research

Step 8- (PISF) Delimitations

Step 9- (Optional) objectives aims and goals
STEP10-(optional) research motivations
PISF: probable in some fields, but unlikely in others
**2004 Version of the CARS Model (Swales, 2004: 232) as
Chapter to the NS AND SS Introductions in this Study**

5. Conclusion

This study investigate overall rhetorical patterns of thesis introduction section of SS and NS. The move analysis used in contrastive studies like this study helps to be familiar with the unique characteristics in the writing of second language writers. The results are based on the identification of moves by the researcher by using a modified model for thesis introduction. The general Move-Step Structure Analysis (Swales, 2004) revealed that the three moves in the CARS Model, namely, M1, M2 and M3 are not existed in almost the entire thesis. In addition to the overall selection of moves, it is significant to also pay interest on the whole sequencing and cyclical patterns of moves. Seven out of 20 NS introductions in the corpus had the M1-M2-M3 move structure pattern. In the remaining 17 NS introductions, there was a variety of different combinations, which made it hard to identify other patterns of frequent use. As far as the SS introductions were concerned, M1-M3 pattern was the most commonly preferred combination. In 11 out of 20 of the introductions this pattern was employed.

Every culture has its own structure. Pakistani writers have their own optional, obligatory and conventional moves. When researcher compares these results with other studies they show different results.

Above mentioned results suggested that both NS and SS shared same moves to some extent. Differences are only there when move 2 is under discussion. This shows that both disciplines share same rhetoric. But differences are their when steps are concerned. Both disciplines have difference of percentage of steps. Second, variations in the two sets of texts may reflect culture-specific traditions and different prospects from their particular discipline communities. It is also noted that when researcher compare her results with other studies they also show cultural changes. It shows that Pakistani writers have their own move and steps structure.

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