
EXPLORING VISUAL AND TEXTUAL DISCOURSE OF APPLIED LINGUISTICS POWERPOINT CONFERENCE PRESENTATIONS

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Abstract

Although PowerPoint presentations, as a relatively new research genre, are widely used in academic settings, they have remained underexplored in applied genre studies and the existing literature has mainly addressed hard and life sciences. In this paper, we analysed the textual and visual characteristics of 438 PowerPoint Frames projected in 20 English presentations at a number of Applied Linguistics (AL) conferences held in Iran in 2009. Apart from exploring generic features of the slides, they were classified according to the typology of visuals suggested by Rowley-Jolivet (2002). The findings revealed the peculiarities of different types of visuals, especially scriptuals, in AL, as a representative field of soft sciences. Moreover, the effect of research type (primary vs. secondary) turned out to be meaningful in terms of certain functional and rhetorical aspects of presentations. The findings showed that the four basic units of other research genres (Introduction-Method-Results-Discussion) are present in and can account for the rhetorical structuring of PowerPoint presentations. Moreover, the structure and distribution of slides pertaining to the four macro-sections as well as their constituent Moves and Steps were analysed with reference to their communicative intents. The findings promise implications for genre theory and practice.

1. Introduction

Conference Presentations (CPs) represent a significant link in a chronological genre chain (i.e. call for abstracts, conference abstract, oral presentation, and research article, among others) and play an outstanding intermediary role in the negotiation and dissemination of knowledge in contemporary academic communities (see Swales 2004 for a comprehensive discussion of genre chains). An important aspect of research on CPs concerns the multimodal nature of this genre which necessitates exploration and analysis of both its visual and textual aspects. Apart from Dubois' (1980, 1982) pioneering studies in pointing out the role of visuals in conference presentations, Rowley-Jolivet (2000, 2002) has drawn attention to the nonverbal dimensions of the genre of conference presentations.

In his seminal volume on research genres, Swales (2004: 4) points out a number of contemporary trends that "have impinged on research communications in various ways". One such trend is technology. He draws upon the intersection of technology and genre and discusses the effects of PowerPoint on lecture preparation and deliv-

ery and elaborates on how this new technology blurs the boundaries between academic and commercial discourses. The genre of conference PowerPoint presentations is also considered important because of its implications for the individuality and identity of academics as ‘the source of the utterance’ rather than ‘the animator’ (Myers 2000: 184).

In an attempt to strike a balance in favour of the overlooked spoken research genre of conference presentations in the literature, Rowley-Jolivet (2002: 20) draws attention to the conference paper and its striking feature, namely “the importance of the visual channel of communication”. To Rowley-Jolivet, visuals, such as the frames of PowerPoint presentations, are the key elements in gaining an understanding of the cognitive and rhetorical roles that the genre of conference presentation has in common with other research genres. Nonetheless, as Rowley-Jolivet (2002: 21) emphasizes, it is the very same visual, along with the verbal aspect of the conference presentation which, when combined with time and space relationships, can create a new channel of communication, with the visual channel carrying a “heavy organisational, interactional and ideational burden”.

Rowley-Jolivet (2002) analysed a corpus of 90 presentations, delivered by an equal number of native and non-native scholars, in the conferences of three fields: medicine, geology, and physics. The researcher reported a meaningful proportion of different types of visuals: 33.6% graphical, 25.5% figurative, 23% scriptural, and 17.9% numerical. Rowley-Jolivet’s four types of visual are described in Section 2. The high frequencies of graphical and figurative slides along with the strategic use of black and white versus coloured visuals are among the features accentuated by the researcher as idiosyncrasies of this genre, at least according to the conventions of the disciplines represented. Nevertheless, the role of scriptural visuals as framing, closing and boundary devices and their role as relief aids in international events, as well as their large quantity (about a quarter of the visuals) make this type of visual an integral part of this hybrid genre. Rowley-Jolivet comes to the conclusion that the role of visuals in structuring discourse in conference presentations is, all in all, even more important than that of the verbal element. In fact, she states (2002: 38) that “[t]he English language is not the only international ‘language’ of science: the visual mode of discourse also fulfils this role”.

In spite of the communicative role of conference events in academic discourse communities, this universe of discourse has not been scrutinized adequately. One reason can be the complexity of the overlapping and juxtaposing discourses that are brought into this event by the participants (see also Swales 2004: 197). Likewise, although the emerging genre of PowerPoint presentation is expected to have a great influence on different aspects of genre theory and practice, researchers in the ESP tradition of applied genre analysis have not explored the characteristics of this multimodal genre adequately yet. Indeed, although the scanty literature on the genre of PowerPoint presentation has addressed the different aspects of the use of Microsoft PowerPoint presentation for educational purposes (e.g. Bartsch & Cobern 2003; Apperson, Laws & Scepanisky 2008), to the best of our knowledge only Rowley-Jolivet deals with this type of presentation from a discourse perspective.

2. Background and theoretical framework

Expressing dissatisfaction with the scanty literature on visual genres as a result of the primary focus on textual genres, Johns (1998) highlights the need for developing literacies other than textual – namely visual and quantitative literacies – among academics and professionals. Furthermore, she draws attention to scholars' contrasting ideas regarding the universality or culture-specificity of such literacies.

Drawing upon Johns' (1998) conclusions and taxonomies, and in order to provide a more comprehensive and rigorous classification for the visuals, Rowley-Jolivet (2002) makes a key distinction between monosemic or graphical images (e.g. graphs, diagrams, and maps) and polysemic or figurative images (e.g. photographs) as a fundamental part of her four-way typology of visuals and explains (2002: 27) that “[i]n the former, which are conceptual and constructed, each element has a single value or meaning, defined in advance”, while in the latter “the different visual components are open to several interpretations”. To be able to account for other types of visuals in her data, she also introduces other types of visuals, namely scriptural and numerical. Rowley-Jolivet (*ibid.*) defines scriptural or text visuals as those serving “various pragmatic or interactive purposes specific to the delivery of an oral communication: presenting the plan of the talk, summarizing the main conclusions”. By numerical visuals she means the mathematical system that covers “mathematical formulae and numerical tables” (*ibid.*).

What makes her classification scheme flexible and useful even in explaining the status of hybrid visuals is that it has been represented as a pyramid with each of the four categories corresponding to one of the main poles. For instance, maps, graphs and diagrams are placed on the graphical pole, while photographs, X-rays, Scanning Electric Microscope (SEM) and Magnetic Resonance Imaging (MRI) images are situated on the figurative pole, text visuals on the scriptural pole and mathematical formulae on the numerical pole. “Hybrid visuals are placed along the axes connecting the two poles: flowcharts, which include text in diagrammatic form, are placed along the Scriptural-Graphical axis, while visuals comprising a curve plus mathematical formulae are located along the Numerical-Graphical axis” (*ibid.*).

2.1. Macro-structure of presentations

Tardy (2005) and Rowley-Jolivet (2002) maintain that researchers typically showed a tendency to structure their slides following a framework they considered to be the standard macro-model in structuring the main parts of research articles. This conventional macro-structure, proposed and/or adopted by several studies dealing with the macro-proposition of research process genres (Swales 1990; Nwogu 1997; Posteguillo 1999; Martin 2003; Bruce 2008), is composed of four major sections: Introduction, Methodology, Results, and Discussion or Conclusion. However, this four-way model of structuring can only account for what is defined as a primary type of research which involves “investigation of original data of various kinds, such as experimental articles, case studies, surveys and other forms of descriptive and qualitative research” (Yang & Allison 2004: 266); it overlooks secondary research studies which “critically review trends in the research and professional literatures and syn-

thesize research carried out by others” (*ibid.*). Secondary research may be best characterized by a macro-proposition like Introduction-Argumentation-Conclusion (*ibid.*).

2.2. *Micro-structure of Primary Presentations*

The rhetorical and cognitive structuring of each main structural unit of research genres – Introduction, Method – is usually analysed using either one-layer or two-layer models of analysis. The former describes the communicative intents realizing the genre in terms of a number of consecutive ‘Moves’, while the latter utilizes the concept of Moves and their comprising Steps in order to account for the way a genre is actualized.

One of the most widely-used and highly-attested models in research genres is Swales’ (1990) Creating a Research Space (CARS) model for the analysis of Introductions of research articles. This framework has been adopted in the analysis of research article introductions in a variety of disciplines, across different cultures, for different research process genres (see Nwogu 1997; Anthony 1999; Martin 2003; Samraj 2005; Hirano 2009). The model comprises three Moves (establishing a territory, establishing a niche, and occupying the niche) and their corresponding constituent Steps.

One section overlooked until recently in the genre literature is the Method section of research articles. As Bruce (2008) contends, within the ESP approach to genre, Method sections of research reports have been partially described by a number of researchers including Bloor (1998) and Swales (1990). However, it is Lim (2006) who seems to provide an acceptable analysis of the linguistic features of Method. The model put forward by Lim (2006) based on the analysis of 20 business management research article methods appears to provide an approach to understanding and analysing the discursual functions and structuring of this section for our study.

The model proposed by Lim (2006) seemed to work well in terms of explaining the Method section of other research process genres and for disciplines other than management, e.g. for applied linguistics conference abstracts (Talebzadeh 2007). Consequently, this framework with three Moves (Describing data collection procedure/s, Delineating procedure/s for measuring variables, Elucidating data analysis procedure/s) and 12 Steps might be adopted as a starting point in describing the structure of the PowerPoint slides.

The conventional concluding sections of research articles, and by the same token other research genres, are considered to be Results as well as Discussion or Conclusion. The findings of Yang & Allison (2003) on the concluding sections of a sample of 20 applied linguistics research articles (RA) appear to shed some new light on the structure and functioning of the final, neighbouring sections and their influence on each other.

3. The study

The present study attempts to follow up on questions raised by Rowley-Jolivet’s (2002) pioneering study. A general issue of concern in our study is whether the Pow-

erPoint conference slides prepared and presented by Iranian applied linguists can point to some shared knowledge and awareness among the members of this discourse community regarding the visual and textual organization and features characterizing PowerPoint conference presentations as a genre. More specifically, three main objectives are pursued in this study. Firstly, we intend to investigate the typology, function(s) and characteristics of visuals in applied linguistics as a soft science. The second motivating factor is to gain insights into the extent a number of existing textual models proposed for the written research genres like the research article (both macro-structure in terms of the IMRD sections and micro-structure in terms of moves and steps realizing those sections) can account for the cognitive and rhetorical structure of the visuals – especially considering the assumption we hold that scriptural visuals might be a salient feature of presentations in many soft sciences. In other words, given the importance of visuals, this study attempts to establish whether there is any relationship between the written research genres, represented by the research article, and the intermediary, hybrid genre of PowerPoint conference presentation (it is worth noting here that we are analysing just 16 conference presentations in relation to this framework – see 4.1. and 4.2. below). Finally, we intend to see whether it is possible to identify instances of genre features that can be attributed exclusively to the use of Microsoft software in preparing and presenting the visuals.

4. Method

4.1. *The corpus*

This study builds on the assumption that the textual and visual features of scientific discourse might be different in hard and soft sciences. The scanty existing literature has concentrated on the role of visuals in hard sciences, leaving out the soft science disciplines. Therefore, the corpus of this research was taken from one discipline within the soft sciences, namely applied linguistics. More than 200 Iranian researchers were contacted through email and were asked to send the PowerPoint files of their slideshow presentations to the researchers. The presentations had been presented in English in short sessions of 15 to 20 minutes at two prestigious applied linguistics annual conferences (TELLSI 7 and IELTI 4) held in Iran in 2007. From among the 35 received files, twenty of them were used for analysis. Fifteen presentations were left out since some researchers had sent us more than one presentation or presentations from conferences other than TELLSI 7 or IELTI 4, or they were in formats other than PowerPoint (for example, PDF files). Four of the PowerPoints were based on secondary research and sixteen reported primary research. The final corpus consisted of 438 visuals. Some considerations were taken into account in selecting the corpus. First, applied linguistics is the researchers' field of study. Hence, they are familiar with issues of the field and the problems associated with consulting subject informants do not jeopardize the project (Bhatia 1993). Moreover, in order to be able to run an in-depth analysis, the effects of intercultural and intracultural variations as well as possible dynamicity over time (Tardy 2005) were checked by using the

sample from two representative conferences of Iranian applied linguistics discourse community held in one year.

4.2. *Scheme of analysis*

The typologies and Move and Step models presented by previous researchers for the analysis of research genres were utilized to analyse the visuals projected in the applied linguistics conferences. Rowley-Jolivet's (2002) four-way typology of visuals (i.e. scriptural, graphical, figurative, and numerical) was adopted. It should be mentioned that Rowley-Jolivet makes a distinction between figurative type I and type II visuals. However, in the current study, just the main category of the figurative type proved to be sufficient.

Assuming that the conference presentation has the 'intermediate status' of "lying between the research work itself and the published product of the research article" (Swales 2004: 199), we may expect it to be influenced by the cognitive and rhetorical structuring of the written research process genres. In the present study, we distinguished between primary and secondary research. However, only primary research PowerPoint presentations were analysed for their macro- and micro-structures. Nonetheless, other characteristics of the visuals of the two types of research were reported. Decisions regarding the main rhetorical section to which a slide or group of slides belonged were made using both the slide heading(s) as well as the content of the visual. In most cases, the content of the slide(s) matched the titles, yet in the few cases of mismatch the cognitive and communicative intention and content were taken into account.

Swales' (1990) CARS model for Introduction was adopted in analysing the rhetorical Moves and Steps characterizing the visuals (PowerPoint Frames) relating to the Introduction section of the presentation. Lim's (2006) model for the Method section was adopted for classifying and explaining the Moves and Steps characterizing the structure of AL PowerPoint slides.

To analyse the concluding slides, we drew upon the models proposed by Yang & Allison (2003) for the concluding sections of Applied Linguistics research articles, namely, Results, Discussion, Conclusion, and Pedagogical Implications sections. However, our initial analysis confirmed that a more economical and appropriate classification is the one following the conventional two final sections of Results as well as Discussion or Conclusion. Therefore, we analysed our data for these two sections.

The reliability of the analysis was established through conducting the analysis in several stages. First, an initial coding system based on the suggested typologies and models was developed. Then, each researcher independently determined the types and characteristics of the slides as well as the macro- and micro-structure of the presentations. We discussed the results of the independent analyses and inconsistencies were discussed to ensure there was inter-coder agreement. Finally, a sample of presentations was randomly selected and recoded after a considerable time span (around a year) by the second researcher who had been involved in a similar project. Very few instances – among hundreds of analysed visual types, characteristics, and text segments – were coded differently after such a long time, thus reconfirming the reliability of coding.

5. Results and discussion

5.1. *Distribution of the slides*

As already pointed out, to obtain a better picture of the role of research type in shaping and structuring PowerPoint slides, the 20 presentations included in our sample represented both primary and secondary types of research. To begin with, as Table 1 indicates, visuals are salient in the applied linguistics conference presentations. The average number of slides per presentation is around 22. This is comparable to the corpus of presentations in hard and life sciences explored by Rowley-Jolivet (1999, 2002): 23 per presentation and a range of 4 to 88 slides for each presentation.

Type of presentation	Primary	Secondary	Total
Number of presentations	16	4	20
Number of slides	325	113	438
Range (Min and Max slides)	7-51	19-41	7-51
Average number per paper	20.30	28.25	21.90

Table 1. Features of slides across research types

As Talebzadeh (2007) points out, there is a preference for primary research in Iranian conferences on AL. The distribution of research types presented in the conferences in our corpus may be due to the emphasis in most of the call for papers requiring the contributors to send original and data-based research proposals.

Also, as Table 1 reveals, the average numbers of slides in primary and secondary research types of presentations are 20 and 28, respectively. Perhaps, in order to present an effective and convincing argumentation, which is the overriding purpose of the secondary articles, the presenters tend to use more slides. Also, as Table 2 illustrates, the percentage of Scriptural visuals is higher in secondary research presentations. In fact, almost all of the slides, except for 11, in secondary research presentations are Scriptural. Rowley-Jolivet (2002: 31) states that these types of visuals “act as a form of textual metadiscourse which ‘[organizes] propositional information in ways that will be coherent for a particular audience and appropriate for a given purpose’ (Hyland 1997: 7)”. The saliency of metadiscourse elements may be one of the distinguishing features of secondary type of research, at least in some research genres (see Talebzadeh 2007). By the same token, the higher number of slides in the secondary type of research might make sense as serving metadiscourse function(s) in presenting a compelling argumentation. This seems to be an issue deserving further exploration.

5.2. *Types of slides*

To provide a satisfactory description of, and consequently an explanation for, the multimodal genre of conference presentation, we initially tried to see what types of visuals characterize the slides prepared by Iranian applied linguists.

One distinguishing feature of applied linguistics PowerPoint presentations is the prevalence of Scriptural slides. As Table 2 indicates, Scriptural visuals comprise 74.6 per cent of the total number of slides analysed. This figure becomes more meaningful when we compare it with the proportion of other major types of slides in the corpus as well as the corresponding figures from the literature. The next most frequent type of visual is numerical which accounts for 10.7 percent of the slides. Graphical and figurative visuals comprise 2.9 per cent and 0.6 percent of the corpus, respectively.

Type of slide	Primary			Secondary			Total		
	No.	Range	Perc.	No.	Range	Perc.	No.	Range	Perc.
Graphical	12	(0-3)	3.0 %	1	(0-1)	0.8 %	13	(0-3)	2.9 %
Figurative	1	(0-1)	0.3 %	2	(0-1)	1.7 %	3	(0-1)	0.6 %
Scriptural	224	(4-43)	68.9 %	103	(10-39)	91.1 %	327	(4-43)	74.6 %
Numerical	47	(0-11)	14.4 %	0		0 %	47	(0-11)	10.7 %
Figuro-script	1	(0-1)	0.3 %	1	(0-1)	0.8 %	2	(0-1)	0.4 %
Scripto-graphic	18	(0-5)	5.5 %	7	(0-5)	6.1 %	25	(0-5)	5.7 %
Graphico-numeric	2	(0-2)	0.6 %	0		0 %	2	(0-2)	0.4 %
Scripto-numeric	19	(0-8)	5.8 %	0		0 %	19	(0-8)	4.3 %
Total			~100 %			~100 %			~100 %

Table 2. Frequency and percentages of slides across research types

As for the hybrid slides, the most frequent are scripto-graphical and scripto-numerical slides comprising 5.7 and 4.3 per cent of the total. One noticeable point about these types of slides is the dominance of the scriptural aspect over the numerical or graphical dimension in terms of density and/or organizational value. Although the prevalence of Scriptural slides is common in both types of primary and secondary research presentations, this dominance is more conspicuous in the latter type. Around 67 per cent of the primary presentation visuals are Scriptural, while the proportion is as high as 91 per cent for the secondary research presentations. Furthermore, maybe due to the nature of this research type, there is no instance of numerical visuals in these presentations.

A quick comparison of the relative importance of the major types of visuals in three representative fields of life and hard sciences (as reported by Rowley-Jolivet 2002), on the one hand, and a representative field of soft sciences in the current study (i.e. applied linguistics) may provide clues as to the role of visuals across sciences and disciplines. An obvious distinction can be made here between life/hard sciences and soft sciences regarding their reliance on different types of visuals. While image and semiotic systems other than linguistic (graphical and figurative) account for more than half of the visuals in life and hard sciences, the visuals in soft sciences

are still dominated by verbal and linguistic systems even in a multimodal genre like PowerPoint. This is called by Groupe μ (1992: 52 cited in Rowley-Jolivet 2002: 20) the “imperialism of the word”. As a result, while images play a significant discursual role in hard and life sciences, it seems that the textual aspect – playing organizing as well as communicative functions – dominates in soft sciences.

5.3. *Characteristics of the slides*

It is hypothesized that certain features of the visuals, apart from their types, may characterize their use in each discipline and the corresponding discourse community. Some of these characteristics are found to be related, in one way or another, to the use of Microsoft PowerPoint in creating slides for presentation.

5.3.1. *Title slides*

A common feature in the presentations in our corpus is the existence of title slides. All 20 presentations in our sample included at least one slide that announced the title of the corresponding paper. The number of these introductory slides preceding the first main visuals in some instances was up to three slides, and they added up to 32 visuals altogether. However, the content and type of visual in these slides was not always consistent. Many slides, apart from the title of presentation, included the name and affiliation of the researcher as well as the date or name of the event. There were, however, a number of presentations that did not include the name of the presenters and researchers.

In one instance, the last slide included not only the ‘thank you’ message but also again the name and affiliation of the presenter as well as the name and date of the event. There were also instances of presentations with one slide quoting some excerpts that was somehow related to the topic to be discussed. Finally, a salient feature of the Iranian discourse community PowerPoint presentations is mentioning God in 10 out of 20 presentations analysed. Al-Ali (2009) documented a similar finding in his analysis of academic and socio-cultural identities in a corpus of dissertation acknowledgements written by Arab students.

Two reasons may be cited as probable causes for the absence of title slides in a number of presentations. Firstly, the presenters might have assumed that the audience already knew the presenter’s name and affiliation as they appeared in the conference schedule. Secondly, the absence of name may be a sign of modesty.

The point that half of the PowerPoint presentations had a slide reading *In the Name of God*, or an equivalent variation, shows that this preference is more than an individual option. This is a frequently-used optional feature of the Muslim community of scholars. There is even an instance of such slides in the sample embracing the full Arabic phrase *In the name of Allah, the compassionate, the merciful* which is an Islamic expression used by Muslims at the beginning of a new enterprise, hoping for blessing and success in it.

5.3.2. *Slide headings and fonts*

Another common feature in all 20 presentations was the use of slide headings. The significance of the headings becomes more apparent when they are considered in the light of some other features that characterize these headings and the interactive

metadiscoursal role they can play in directing the audience (endophoric metadiscourse) (see Hyland 2005: 49) as well as communicating the content of the slides or proportion of talk. Although a variety of font types and sizes are used in the slide headings, the saliency of Arial font type as well as 44, 40, 32, and 36 font sizes, in that order, was noticed.

The nature of headings is often determined by the default layout settings of Microsoft PowerPoint. For example, depending on the setting of the computer and software, the body of the slides is usually bulleted, the default font type is Arial, and the default font size for the slide heading (title) is 44, while it is 32 for the text. It should be emphasized that these defaults might change as soon as one changes the design of the slide. One more interesting feature of the software with regard to font size is that the increase or decrease in font size is also to some extent automatic; whenever, for example, the textual content of the slide is more than its capacity, the font size shrinks automatically to compensate for the space constraint. Yet this shrinkage in size is done in fixed numbers that vary according to the slide design and layout.

The detailed results of our analysis reveal that the default features pointed out above have a deep influence on the genre features. The Arial font type in both headings and texts of Scriptural slides along with the default font sizes and their automatic shrinks are outstanding characteristics of these visuals. The dominant use of Arial as the preferred font type in these academic conferences can indicate the effect of Microsoft PowerPoint in shaping and changing some academic conventions related to the genre under study. While the recommended font type in many scholarly style-sheets or guides is Times New Roman, perhaps for readability considerations, the inclusion of Arial as the default font type in many slide designs incorporated as part of the Microsoft PowerPoint package has resulted in its being bestowed the status of a prestigious, institutional font type.

Needless to say, individual variations (see Tardy 2005) can be observed as is evident in the use of different font types, sizes, and even colours. Although font types and sizes may be the result of the automatic shrinking or resizing of these features, they, along with other possibilities like underlining, italicizing, highlighting in bold or colour, were strategically utilized in many instances by the presenters to communicate ideas or messages that would otherwise need verbal and/or textual elaboration and also in order to save time.

Therefore, the expressions of disciplinarity and individuality, at least as far as the use of font types and sizes are concerned, are constrained by the software – Microsoft PowerPoint. This is especially true for researchers who are not familiar with all the utilities of the software or are not willing to exhaust all their potential. Although there are many possibilities for creative use of the visuals provided by the software, as Tardy (2005) argues, it has a role in moulding the genre and its rhetorical functions.

5.3.3. *Bullets and numbering*

A salient feature of PowerPoint software, which may reflect the hierarchical, marketplace-oriented structure of Microsoft Corporate, is the use of bullets and numberings. While it is claimed that this feature is associated with slides of hard sciences, our data revealed their common use in applied linguistics too. More than half of the slides analysed in our sample are either bulleted (N=181) or numbered (N=52). Al-

though the PowerPoint software and its default features may influence the way bullets and numbering are used, there are grounds for arguing that even this feature can be strategically used to serve inter- and intra-disciplinary purposes. For example, in our data, the proportion of both the bulleted and numbered visuals that belong to secondary research presentation is twice as much as the proportion for primary research presentations (the average number of bulleted and numbered slides per presentation is 15 and 4 slides for secondary research conference presentations, while it is 7.5 and 2 slides for primary research conference presentations). What mainly distinguishes these two otherwise similar types of research can be the chiefly argumentative nature of secondary research. It is worth mentioning that the slides that are considered as being bulleted at times used symbols other than dots.

5.3.4. Animations

One of the visual features that is promoted and made possible by the potential of Microsoft PowerPoint is the inclusion of animations. Animations are principally utilized, among other main features, in terms of animation schemes, custom animations and slide transitions. Animation schemes are templates affecting both title and body of the slides, while custom animations are used selectively for a portion of the slide whether title or body. One may not expect instances of animations, given the serious atmosphere of an academic event on Applied Linguistics. Yet the results of our analysis question this conjecture. 15 out of the 20 presentations in our study incorporated animations in 232 visuals. This implies that around 75 percent of the projected visuals used one or more types of animations.

Animation schemes were used in seven out of 20 of the PowerPoint presentations (a total of 109 slides out of 438). Apart from one presentation which used one different scheme for almost each slide of its 23-slide presentation, the other presentations opted for sticking to one animation scheme for the whole presentation. The animation schemes used by more than one presenter are Faded Wipe as well as Elegant (each in three presentations), Rise Up, Brush on Underline, Float and Zoom (each one in two presentations). It is interesting to note that the two presentations using more than one type of animation scheme belong to the secondary type of presentation.

Slide transitions are used in just seven presentations adding up to a total of 90 slides (accounting for approximately 20 percent of the projected slides). Not only is slide transition the least frequent animation, it also shows the least amount of variation in the utilization of patterns used. Fade Smoothly, Comb Horizontal, Wipe Down, Newsflash, Random and Cut are more frequently used by the Iranian Applied Linguists to mark transition from one slide to the next.

Custom animations are the most frequent and varied class of animations. 12 presentations have used custom animations in the title or body, or both title and body, of their slides. Again, although there is only one presentation which has used one different custom animation for almost each slide of its 23-slide presentation, the other PowerPoint presentations also show more variation in the array of custom animations used (between one to five different types of custom animations) than the application of animation schemes and slide transitions. Fly In and Blinds (each in five presentations), Fade, Wipe and Ease In (each in four presentations), as well as Custom and Descend (each in three presentations) proved to be more popular among the Iranian Applied Linguists while preparing their conference PowerPoint presentations.

The secondary research presentations (with an average of almost 21 slides with animation per presentation) included a higher proportion of animation slides, double that for primary research presentations (with an average of almost nine animation slides per presentation). The consistently higher frequency of animations in secondary-research presentations may be attributed to the structure and functioning of this type of research. Indeed, it can be argued that animations may function as a type of metadiscoursal strategy in fulfilling the related argumentative functions inherent in secondary research. There were instances in secondary type of research that the opposing arguments or statements presented in two columns within one single slide appeared in two different types of animations, confirming even more such a conjecture. Moreover, across the two types of research, in cases where just a few slides have animations, they are either the beginning title slides (or In-the-name-of-God slides), or the concluding slides (or thank-you slides).

5.3.5. *Background colour and design*

In our sample, while there is a diversity of background designs, most of the designs fall within the options offered by the software including Capsules, Stream, Globe, Ocean, Textured, and Beam. Concerning background colours, the choices converge even more in spite of the diversity of the spectrum colours; blue is the colour of choice in as many as eight presentations followed by white (three cases), with some others being partly white or red (two cases), orange (one case), green (one case) and mixed colour presentations (mainly two colours from the aforementioned ones). Although the background chosen for the slides to be projected on the screen in a scientific conference may seem to be a matter of personal preference, there are other factors that might influence the choice of background colour and design. One such factor can be the cultural and disciplinary expectations of the discourse community. Another source of influence can come from the constraints imposed by Microsoft PowerPoint.

Nevertheless, it seemed that the very same features of design and colour were used strategically by the presenters to fulfill a number of communicative purposes. In one presentation, for instance, three different background designs were used. The first background was used for the title slide and a middle slide that introduced the present study, methodology, results and conclusion. But all the intervening slides had a second design and a different heading style, font type and size. Also, a third background which looked more like 'real life' was used for thanking the audience and marking the end of the presentation.

Another presentation, in spite of being a lengthy one, did not include many headings. Instead, the presenter made use of two colours – green and blue – in two patterns for the background. Although the presenter did not use headings to signal the main sections, he used slides of different patterns at the beginning of each main section along with the name of the main unit (e.g. method) to indicate the start of a new rhetorical unit. Thus, it is not only the utilization of texts that serves the purpose of segmenting the presentation, but the same role can be fulfilled by using colours, patterns and font sizes that characterize the generic sections and boundaries (and, of course, animations and popular imagery).

5.3.6. *Popular imagery*

Popular imagery includes snapshots, postcards, portraits, teachers and students in class, and cartoons. As indicated by Rowley-Jolivet (2002: 29-30), although these visuals are used in popularization, their use in conferences indicates a strategy to soften the serious academic tone dominating scientific gatherings. Images are also taken to function as boundary devices. Moreover, they may express the individuality of the presenter. In our sample, images did not prove to be a high-priority strategy. Only four presentations out of 20 used postcards (depicting mountains, flowers, or a river), a portrait, and cartoons in a total of seven slides (total number of slides 438). In three of these presentations the images were in the first slide of the presentation (two presentations including mountain post-cards coupled with an In-the-Name-of-God message) and/or its last slide (three presentations with the Thank-you message). One explanation may be related to the nature of the disciplines: while hard science topics are permeated with less flexible concepts and visuals, the nature of topics discussed in soft sciences is more attractive and flexible. As an alternative to the use of popular imagery, in some presentations background designs of natural scenes were used (one whole presentation as well as the last slide in another presentation).

5.3.7. *Thank you slide*

Apart from the differential utilization of background colour and design as well as the allocation of separate Scriptural slides announcing the beginning of each section in some presentations, the end of the presentation is announced by a final Scriptural slide. We called it the 'Thank You' slide. This slide appeared in 14 paper presentations as the closing slide. The wording of the messages is different ranging from 'Thanks', to 'Thank you all', and 'Thank you for your attending and attention'. Sometimes, the theme of the presentation and/or the intended implication of the paper are reflected in this closing slide. For instance, in one case the presentation was about critical pedagogy and its implications for language teaching and the last slide read 'Thanks for being critical'.

5.3.8. *References and citations*

Giving references to and citing the work of other members of a discipline is considered as an indication of doing an acceptable, situated piece of research (see Salager-Meyer 1999). In our sample, 12 out of 20 PowerPoint presentations have citations and references included within a total of 64 slides (ranging from presentations with references and citations in one to 13 slides). It could be argued that the citations used in the presentations, however, may be of little practical use for the audience, since tracing and consulting the actual reference on the spot is not feasible (considering the fact that most of the presenters in our sample did not distribute a take-away handout copy of their PowerPoint presentations to the audience). Still, apart from reflecting a legitimate concern with acknowledging other scholars' findings and ideas, their inclusion in the text might be a gesture to add a scholarly air to the presentation and justify the credibility of the claims made in the presentation. This claim is accentuated by the fact that all secondary types of research have citations in their slides. In one case three slides of the 19-slide presentation were dedi-

cated to listing the full references. Therefore, presenters might include citations to amplify the force of argumentation.

5.4. *The structure of primary presentations*

In spite of the mediatory nature of conference presentations, between the research project and its published report, it is the structure of the written scholarly report that appears to dominate the organization of the presentations both in terms of macro-structure and micro-structure (see also Rowley-Jolivet 2002; Swales 2004; Tardy 2005). It should be mentioned that in our analysis of the main sections as well as their comprising Moves (and Steps), we excluded the opening and closing slides. Also, only the slides from the 16 primary-research conference PowerPoint presentations were analysed.

5.4.1. *Macro-structure*

The macro-structure of written scholarly reports – in terms of four main sections of Introduction, Methods, Results, and Discussion or Conclusion – dominated the organization of the presentations and therefore guided our analysis. As Table 3 illustrates, the main four macro-sections that characterize most research genres are present with a seemingly equal frequency level. Obviously, in the case of conference PowerPoint presentations, each section as well as its comprising Moves and Steps were actualized through one or a number of slides. Introduction and Results proved to be the sections with the highest number of slides (34% and 31% respectively). Method comprised 22 per cent of the total slides projected. Finally, Discussion or Conclusion had the least number of slides.

It should be pointed out that in determining the frequency and distribution of slides pertaining to each section, the researchers considered the communicative purposes and functioning of the genre of conference PowerPoint presentation. It can be argued that it is the communicative purposes and functioning of the genre of conference PowerPoint presentation which appear to determine the frequency and distribution of slides pertaining to each section and their Moves. The presenters realize that the limited time of conference presentations as well as the attentional resources of the participants should be optimally directed so that the results of the study being reported lead to a convincing argument and/or conclusion. Obviously, this requires a highly strategic use of the slides (this is elaborated on in the subsequent section) to properly do foregrounding and scene-setting, introduce the study, show its reliable scientific methodology, and present the findings to be able to – finally and, in most cases, succinctly – put forward the desired conclusion.

5.4.2. *Micro-structure*

Introduction slides. Swales' (1990) three-move CARS model was the frame of reference in the micro-structure analysis of the Introduction section of PowerPoint presentations. Our analysis indicated that more than 60 slides are devoted to 'establishing the territory', the first Move of the Introduction, which paves the way for the 'establishment of a niche' by claiming centrality, making topic generalizations, or reviewing the literature and defining some key terms (see Swales 1990). Foreground-

ing and setting the scene to bring the audience into the picture in the limited time of the conference presentation proved to be an obligatory move in the sample analysed.

A further clue to the awareness of discourse community members regarding the decisive role of such foregrounding is the huge difference between the number of slides devoted to the first and second Moves on the one hand (76 visuals), and the relatively low number of slides (19) that ‘occupy the created niche’ by means of announcing present research or the purpose of the study, on the other hand. It should be mentioned, however, that this relatively low number of visuals is evenly distributed among almost all primary research presentations so that the purpose of the study is announced clearly in all presentations. Apart from that, the rhetorical function of ‘occupying the niche’ was realized by the title slides, too (see Soler 2007; Swales 1990).

Main Sections and Moves	Number of presentations having the Section/Move	Number of primary slides	Slides per presentation (approximately)
Total	16	273 (100 %)	17.1
Introduction	16	93 (34 %)	5.8
I:M1 (establishing territory)	16	60	3.8
I:M2 (establishing a niche)	10	16	1
I:M3 (occupying niche)	14	19	1.2
Method	16	60 (22 %)	3.8
M:M1 (describing data collection procedure/s)	15	22	1.4
M:M2 (delineating procedures for measuring variable/s)	16	28	1.8
M:M3 (Elucidating data analysis procedure/s)	7	12	0.8
Results	16	85 (31 %)	5.3
R:M1 (Preparatory Info)	3	10	0.6
R:M2 (Reporting results)	16	69	4.3
R:M3 (Commenting on results)	6	14	0.9
R:M4 (Summarizing results)	0	0	0
R:M5 (Evaluating the study)	0	0	0
R:M6 (Deductions from research)	0	0	0
Discussion or Conclusion	15	35 (13 %)	2.2
D:M1 (background info)	0	0	0
D:M2 (Reporting results)	0	0	0
D:M3 (Summarizing results)	2	4	0.3
D:M4 (Commenting on results)	5	10	0.6
D:M5 (Summarizing the study)	9	12	0.8
D:M6 (Evaluating the study)	7	3	0.2
D:M7 (Deductions from research)	11	25	1.6
Total	16	273 (100 %)	17

Table 3. Distribution of primary research slides (16 presentations) based on the main sections and their Moves

Method slides. As explained earlier, to deal with the Method section of Power-Point presentations, we resorted to the three-Move model of Lim (2006) suggested for Management research articles. All of the 16 primary-research presentations in our sample include a slide that presents at least one Move (and Step) pertaining to Lim's (2006) model. Actually, seven presentations have elements from the three Moves suggested for the Method section within their slides. Actualization of the Method section through two Moves happens in eight presentations, while one presentation draws upon only one Move to realize the Method section.

A total of 60 slides accounting for 22 per cent of the analysed slides include Moves and Steps from the Method section. Out of this number of slides Move 1 is included in 22 slides, Move 2 in 28 slides, and Move 3 in 12 slides (see Table 3 above). It should be noted here that there were instances where two or even more Moves (or even Moves or Steps from another rhetorical section like Introduction or Results) were included in one slide; on the other hand, there were instances where the Steps of one Move were included in more than one slide (that is why the number of slides does not add up to 60).

The presenters of primary research studies in our corpus felt compelled to include some material that performs the communicative function of Moves 1 and 2, and especially the first Step of Move 1 describing the sample (15 presentations) as well as the second Step of Move 2 explaining methods of measuring variables (13 presentations). An outline of the design or the experimental procedure is also included in many of the visuals. Move 3, elucidating data analysis procedure, at times stretching to a few slides in a number of presentations, does not seem to be as obligatory as the other two preceding Moves. One explanation for this may be for reasons of economy. Alternatively, it seems that the presence of similar content in the results section slides makes the reiteration of information on data analysis procedure redundant.

Although visuals presenting the Method sections are not very prevalent in our corpus (the average number of Method slides per presentation is 3.75 out of approximately 17 slides) compared with Introduction and Results (the average number of slides per presentation devoted to Introduction and Results is 5.81 and 5.03, respectively), it is more frequent than the final Discussion slides (2.18 slides per presentation). In addition to the major function of Method in reporting basic information about the participants and procedures used in data collection, it reveals the familiarity of the researcher(s) with the conventionalized research methodologies of the discipline and, accordingly, signifies the researchers' commitment to principles of scholarly discourse in the corresponding academic community. The presenters' awareness of the generic structure of the Method section was realized in their inclusion of bulleted sub-headings for participants, instrument(s) and procedure (see also Lim 2006; Talebzadeh & Samar 2006).

Results slides. The second most dominant section of the IMRD macro-structure in the slides of applied linguistics conferences was the Results section, comprising a high number of visuals including numerical slides and graphical slides. The use of numbers, graphs, charts and tables is one of the strategies adopted by researchers in soft sciences in order to win empirical credibility for their findings and catch up with

their counterparts in hard sciences (Kress 2003). Moreover, the Results section serves as a link connecting all the efforts already made by the researcher in establishing a territory, creating a niche, proving the rigour of the procedures followed, and channeling the research to the final conclusion or implications drawn (Swales 1990; Yang & Allison 2003).

The Results section was a prominent section and compulsory part of the conference presentations in our corpus. To analyse the slides pertaining to the Results section we drew on Yang & Allison's (2003) model for the final sections of Applied Linguistics research articles. As can be seen from the second column of Table 3, although there were instances where the main Moves of Discussion section — Moves 4 and 5 — were missing, the major Moves in reporting the Results were present in all presentations in our corpus. Also, as Yang & Allison (2003) argue, the effect of neighbouring sections is apparent in the genre of PowerPoint slides. While the main function of Results is reporting the results, there were instances in our corpus where the major Move of Discussion, i.e. commenting on the results, is also incorporated in the Results slides.

Discussion slides. Our analysis of the corpus in relation to the move structure proposed by Yang & Allison (2003) (see Table 3) confirmed that applied linguists are not so willing to allocate a noticeable part of their limited time and space of presentations to Discussion. They prefer to try other modes and sections for commenting and summarizing the findings. Apart from one presentation that used 13 slides for the pedagogical implications of the study, the main communicative functions of the concluding section of most presentations were realized using a minimum number of visuals: commenting on the results, summarizing the study, and deductions from the research are actualized in only 10, 12, and 25 slides, respectively.

One interesting finding here is that the number of slides devoted to deductions from the research is even more than the slides representing Move 4, i.e. commenting on the results, which was introduced by Yang & Allison (2003) as the pivotal Move of this section. This finding might be explained by the nature of applied linguistics, which requires a concern with the factual evidence concerning language learning and teaching.

6. Conclusion

The effect of technology on the development of new, hybrid genres necessitates a closer look at its artifacts like conference PowerPoint presentations. However, this genre of technology has not yet drawn much interest in the ESP tradition of applied genre analysis. One possible reason, as reiterated by Rowley-Jolivet (2002), may be what is known as imperialism of the word in the genre analysis world. The full appreciation of the features and functions of the ever-growing genre of PowerPoint requires other means of analysis than linguistic systems. Likewise, there are numerous features and characteristics that need to be attended to when scrutinizing this genre. The current study has aimed at investigating the characteristics of this under-

represented genre and providing insights into and explanations for the genre of conference PowerPoint presentations in applied linguistics.

Having emphasized the importance of visuals, we tried to examine the relationship between the written research genres, represented by research articles, and the intermediary hybrid genre of PowerPoint presentation in a corpus of Applied Linguistics conference presentations. Our focus was on the visual dimension of the genre, the features that might characterize applied linguistics PowerPoint presentations as well as the effects of the software in shaping the genre. Also, we examined the similarities between the organization of conference PowerPoint presentations and the conventional rhetorical macro-structure and micro-structure of research process genres.

The findings revealed that the genre of conference PowerPoint presentation can well serve what Tardy (2005: 323) refers to as “expressions of disciplinarity”. On the one hand, the conference PowerPoint slides prepared and presented by Iranian applied linguists can indicate some shared knowledge and awareness among the members of this discourse community regarding the visual and textual organization, functions and features characterizing PowerPoint conference presentations as a genre. On the other hand, indications of expressions of individuality were also found in the slides. It is worth mentioning here that the reluctance of many scholars to share their PowerPoint slides for the purposes of this research as well as some voiced concerns for privacy and anonymity issues may accentuate the Iranian discourse community members’ awareness and familiarity with what Tardy (2005: 327, 332) considers as “expressions of individuality” articulated mainly in the visual dimension of a multimodal genre like PowerPoint.

It was also found that the preferred type of visuals in applied linguistics as one of the disciplines falling within the realm of soft sciences is quantitatively different from the favoured types of visuals reported in other studies in hard and life sciences: Scriptural slides are predominant in applied linguistics presentations, while graphical and figurative slides are the prevalent slides, followed by the Scripturals, in hard sciences. In addition, it was suggested that the use of slides and the strategic use of characteristics such as heading and bulleting can be argued to serve a number of metadiscoursal functions. Some distinctive features like the inclusion of “In the name of God” slides also characterized the Iranian sample of conference paper presentations.

Moreover, we found that the four major units of the other research genres can account for the rhetorical structuring of PowerPoint slides. Introduction and Results proved to receive the majority of slides as their function in the conference presentation may imply. The significance of the findings of this study may lie in its concern with non-native (i.e. Iranian) applied linguists and probing the typology, structure, and features of the visuals in conference presentations across primary and secondary types of research.

The findings may have theoretical implications for genre theory and pedagogical implications for Iranian graduate students of applied linguistics. However, we invite caution in making theoretical generalizations based on the findings of this study and highlight the pressing need for further explorations within and across disciplines as

well as within and across cultures including both native and non-native scholars while using larger corpora. Moreover, making a distinction between novice and established members of the discourse community could help upcoming researchers arrive at more illuminating findings.

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