MULTIMODALITY IN ACADEMIC LANGUAGE: ASPECTS OF THE LEXICOGRAMMAR OF PRESENTATION SLIDES

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Abstract

The paper approaches academic talks or conference presentations (CPs) as a research-process genre which is based on the interplay of the written and spoken modes. The aim of the study is twofold: (1) it attempts to present an in-depth overview of research on multimodality in relation to academic language, and (2) it offers a (mostly quantitative) analysis of slides from PowerPoint presentations. The slides are approached as a platform for the study of so-called visual lexicogrammar. The research is rooted in Halliday's systemic-functional framework involving the concept of language functions; it also draws on the genre-based approach to discourse analysis (Bhatia 1993, Martin 1997, Swales 1990, 2004) and multimodal theory as elaborated by Iedema (2003), Kress and van Leeuwen (2006) and O'Halloran and Smith (2011). The findings suggest that the visual lexicogrammar is realized through the interplay of visual and scriptural images; scriptural images dominate over visual images, primarily performing a discourse-structuring role in the slides by signalling the 'IMRAD' stages.

Key words

academic discourse, conference presentation, multimodality, research-process genre, visual lexicogrammar, visual paragraph, visual coding images, text slides

1 Introduction

Over the past decade or so, research into spoken academic discourse has shifted from a relatively narrow focus on language to a broader concern with sociolinguistic, pragmatic, semiotic or ethnographic aspects, all stressing the interactive and multimodal nature of the discourse. Academic discourse, of which academic talks are a part, has attracted attention from researchers working within the emerging field of multimodal discourse analysis. Key interests in this relatively recent approach focus on two broad areas or paths: (i) the study of specific multimodal phenomena, with research drawing on established theories and methodologies and examining domains such as 'the language of mathematics discourse', 'the grammar of visual design' (e.g. Kress & van Leeuwen 2006), or 'the language of colour' (van Leeuwen 2011); and (ii) a focus on exploring general concepts, theories and methodologies that lie behind multimodal studies and approaches (e.g. O'Halloran & Smith 2011). The research presented in this

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paper follows the first path and is part of a larger research project which aims to explore the generic properties of academic talks – specifically conference presentations – with respect to the genre's position and function within a scientific macro (super) genre colony. Within the macro genre colony, the conference presentation represents a rather unique research-process genre (cf. Swales 1990), as the research presented may vary significantly both in quality and quantity due to the genre's momentary and ephemeral nature. The subject of the research presented in this paper is the conference presentation, a genre of academic speech which remains a relatively under-researched area in academic discourse studies; the aim of the research is to study the visual channel of the genre, which is realized by the slides from PowerPoint presentations on applied linguistics topics. The focus is on the following questions: How do multimodal data enable us to study the lexicogrammatical landscape of the genre? How do researchers 'construct' their slides so as to span the gap between the written and the oral? How do the modes contribute to the ideational and interpersonal meanings expressed in the genre and to the textual organization?

2 Research on multimodality so far

In recent years, multimodality has increasingly become the focus of research; this goes hand in hand with "a rapidly growing realization that representation is always multiple" (Kress & van Leeuwen 2006: vii). The concept of multimodality draws on the assumption that there are various semiotic resources that (co-)operate in particular social, cultural and also historical contexts and that language itself is only one of these resources, as well as being just one element of semiotic and discursive practices. Semiotic resources thus combine and cooperate with each other in response to new communicative and expressive needs. From a linguistic point of view, multimodal studies aim to "extend the social interpretation of language and its meaning to the whole range of representational and communicational modes or semiotic resources for making meaning that are employed in a culture" (Jewitt 2009: 1). Multimodality thus challenges the long-established link between language and communication; it stresses the role and potential of the choice of mode and semiotic resources for communication and the meaning-making process. The multimodal analytical perspective – in which language is understood as only one of a host of semiotic resources (along with image, gesture, gaze or posture), being largely dependent on the 'surrounding' modes and operating in conjunction with them – does not imply that language is not taken into account in research. As Scollon and Scollon (2009) suggest, language is a central concept for any multimodal analysis; they understand the relation between multimodality and language as one of 'merger

and redistribution'. Basically, both terms imply that "what is known about language – both codes and functions – has been taken as a kind of prototype of the newly developing knowledge of modes other than linguistic ones" (Scollon & Scollon 2009: 171). More specifically, in terms of 'redistribution', the concept of 'modality' is viewed as having two meanings (which link the notion back to its traditional linguistic interpretations). Modality can be viewed as (i) a mode of communication (speech, writing, image), and as (ii) a linguistic category of mood serving to express attitudes towards the factual content of the utterance. Scollon and Scollon (2009: 180) observe that language is not "[a] prototypical model of all modes of communication" and conclude that "no mode of communication operates in a monomodal fashion".

Some scholars within the field talk about the multimodal (or the visual) 'turn' as if multimodal phenomena were only significant in and characteristic of the modern era; this is rather an idealized view, according to which multimodality is inseparably connected with new technologies. In reality, digital technologies and electronically mediated communication have merely extended the existing forms of interpersonal interaction and text circulation. A 'turn to the multimodal' implies that there are no monomodal situations: we have always lived in a multimodal world and culture, and new technologies shape cultural and discursive practices by rejecting traditional two-dimensional binary interpretative frameworks and by introducing a 'third dimension' in terms of what happens, for example, between a page (text) and a computer screen (slide) (Jewitt 2009).

O'Halloran and Smith (2011) suggest two key factors underlying the development of multimodal studies in terms of a scalar categorization into 'issues', i.e. elaborating theoretical and methodological concepts such as semiotic resources, semiotic modes, practices and media, and 'domains', i.e. the study of particular multimodal phenomena (semiotic resources and/or modes) and their mutual interplay in specific areas. Jewitt's (2009) account of 'keyness' draws on a conceptually distinct categorization; here five key factors for multimodal analysis are based on the synthesis of both theoretical and methodological concepts and may potentially serve as an analytical tool. As these factors are defined slightly differently within different frameworks and approaches as the concept of 'mode' in Jewitt (2009), Kress (2010), or van Leeuwen (2011), what follows is my attempt to generalize their meaning. 'Mode' is a typical and salient notion in the study of multimodality. It is the organizing principle and resource of multimodality; it is shaped by the society and the discourse community that employs it, and at the same time it is strongly and inseparably rooted in a particular culture. 'Modal affordance' subsumes the material and socio-cultural aspects of modes: an image or a text is driven by the logic of space, while the

temporal principle underlies speech. These types of 'affordance' are closely related to and express the meaning potential of the modes, which is another key factor. 'Materiality' focuses on the realization itself, such as for example voice quality (cf. van Leeuwen 2011). 'Metafunction' refers to the application of Halliday's concept of the social functions of language – the three metafunctions, which are seen as the ideational, interpersonal and textual resources of a mode. 'Intersemiotic or intermodal relationships' focus on how several modes may combine in one communicative event and how they jointly cooperate to convey meaning. Intersemiotic relations, and the construction and interpretation of meaning between an image and a text, have aroused much interest in literacy research and reading comprehension development.

Since the research presented in this paper is largely rooted in a Hallidayan social-semiotic framework emphasizing the social elements of language use, it is relevant here to mention Halliday's seminal work *Language as Social Semiotic* (1978), in which the author approaches linguistics as part of a larger discipline, semiotics, which studies the life of signs within society. Though Halliday does not work overtly with the term 'multimodality', his view of language as "one of the semiotic systems that constitute a culture; one that is distinctive in that it also serves as an encoding system for many (though not all) of the others" (1978: 2) may be taken as the springboard for multimodal interpretations. Halliday's systemic functional theory has found followers in Multimodal Discourse Analysis (MDA). As O'Halloran (in print) puts it, "Halliday's SF theory provides a comprehensive framework for MDA because the metafunctional principle provides an integrating platform for multimodal theory and practice".

Kress and van Leeuwen (2006) are among the most influential researchers working within Systemic Functional Linguistics who have recently made considerable headway into the study of multimodality in the field of semiotics of visual imagery and graphics. In their *Reading Images: The Grammar of Visual Design* they claim that both linguistic and visual structures share the same potential for encoding "particular interpretations of experience and forms of social interaction" (2006: 2). Their studies – written either jointly or individually – map a number of areas such as semiotic resources, gesture and movement, voice and music, or colour; most recently, van Leeuwen (2011) has developed and elaborated the concept of 'a social semiotics of colour'.

3 Multimodality in academic speech

Within the academic context, visual and (later) multimodal aspects of the genre of conference presentations have been addressed by several researchers. Ventola's (1999) study investigates the function and role of her own concept of

'semiotic spanning', by which she means "linking up with various kinds of existing and experienced texts (and other semiotic modalities) and creating new semiosis through these links" (1999: 102). Interestingly, the key concept for the present study – i.e. 'and other semiotic modalities' – is enclosed in brackets in Ventola's quote, and the delineation of these 'other semiotic modalities' remains vague in her analysis. Her research is strongly embedded in cohesion and coherence, intertextuality, register and genre, i.e. in an approach based on linguistic and discourse-analytical decoding, and her research results are interpreted only within these categories. Ventola's attempt to identify semiotic spanning between the paper and source materials is rather a matter of resemiotization, i.e. the transformations that occur during the 'life of a scientific fact' in various semiotic systems (cf. Iedema 2003), and at this stage of her research multimodal aspects are not at the centre of attention. Nonetheless, her study's contribution lies in its presentation of conference discourse as a macro genre or a super colony of related genres and in taking into account the genre's existence and realization as a time chain, which inevitably exerts much influence on reshaping semiotic knowledge.

Taking a slightly different stance on academic speech, Rowley-Jolivet (e.g. 2002, 2003 in collaboration with Carter-Thomas 2012) investigates the interplay of text and image in conference talks with the aim of outlining the key factors of shared visual language. Drawing on Lemke's (1998: 92) "combinatorial semiotic principle", which is an attempt at a distillation of various semiotic resources such as visual, linguistic, or mathematical, Rowley-Jolivet offers a typology of field-specific visuals, based on the analysis of video-filmed conference presentations in natural sciences (geology, medicine, physics). Rowley-Jolivet's (2012) approach has been especially instrumental in its focus on the visual channel of communication in conference papers and on how the genre creates and distributes meaning via the visual dimension. She sees the projected text and the speaker's running commentary as two synchronous parallel discourses: both share their ideational meaning but differ significantly in their textual organization. However, as her data and findings suggest, while the ideational content dominates the slides, the interpersonal metafunction realized via the spoken channel "accounts for over two-thirds of all items that are specific to the commentaries [such as] evaluation, shared knowledge and metalinguistic comments" (2012: 159).

4 Methods and materials

As Jewitt argues (2009: 2), "[m]ultimodality, it could be argued, strictly speaking, refers to a field of application rather than a theory". The present study thus attempts to explore specific multimodal aspects of conference presentations

by focusing on the genre's visual semiotic resource. To identify recurrent or generic features, the research draws on the genre-based approach to discourse analysis as represented by Bhatia (1993) and Swales (2004) in their treatment of institutional genres on the one hand, and by Martin's (1997) more general genre concept on the other. The distinction between the two accounts of genre, according to Tomášková (2012: 118-119), lies "in Swales' and Bhatia's focus on genres in professional or academic settings, on genres seen exclusively as reflections of organizational culture and institutional practices." Genres are strongly rooted in the social context and culture; they are addressed to a specific audience and they always reflect the given cultural context which is established both by the producer and the receiver. Genres are repertoires of conventionalized and recurring features, and therefore they are often interpreted as dynamic constructs or kinds of social action. The conference presentation is an academic genre, or in the broader sense an institutional genre, which is never static; it develops mainly in terms of its evolving and changing visual dimension. The genre can be conceived of as a multimodal genre employing (non)verbal visual, audial and audio-visual material. The employment of audio-visual media and new technologies has contributed enormously even to the traditional overlapping and mixing of two modes in a genre at the crossroads of speaking and writing.

As suggested above, the research presented here is rooted in Hallidayan Systemic Functional Multimodal Discourse Analysis, relying on a tri-stratal framework of metafunctions that are contextualized by Halliday's contextual factors of field, mode and tenor. According to Kress and van Leeuwen's (2006) *The Grammar of Visual Design*, all the semiotic resources or modes exist in an interplay, and they are shaped by their inherent features as well as by the society and culture. Visuals, more specifically text slides in the present research, are expected to have their own grammar: "they are not mere decorations or illustrations of the text, but are concept- or theory-laden" (Rowley-Jolivet 2002: 22).

To study how the interaction of spoken and written finds its counterpart in the visual dimension of the genre, the investigation draws on Rowley-Jolivet's (2002) categorization of visuals. However, Rowley-Jolivet's categorization is highly field-specific because her corpus consists of data from the hard sciences (geology, medicine, physics), and – as she concludes – the hard sciences can be expected to have developed their own visual lexicogrammar, which will be different from the visual lexicogrammar found in the soft science(s) being examined here.

The corpus for the present paper is made up of 2:28 hours of video-recorded presentations by native speakers (NS) and non-native speakers (NNS) of English

at an international conference in the soft sciences (in this case applied linguistics): the data comprise the complete text slides and the speaker's commentary. Though the corpus contains two comparable sets of data (NS and NNS), cross-cultural and contrastive aspects are not the focus of the present investigation. The composition of the data enables me to apply a quantitative methodology which will be followed by a limited qualitative interpretation, which is due to the small corpus of data. This is thus a pilot study, carried out as a preliminary step before arriving at any decisive conclusions.

5 Results and discussion

The number of visual images in the seven papers analysed totals 158 text slides in the form of PowerPoint presentations. Table 1 offers an overview of the quantitative data: a quite interesting finding is that the frequency of slides differs profoundly with some speakers – one speaker employed almost ten times as many slides per paper. Such a sharp contrast is due to the method of presentation design: while the speakers with a lower number of slides per paper (10, 13, 14, 16, 22) tend to present one slide as a complete, one-click picture, the speakers with a higher number of slides per paper (30, 53) make use of a different technique for presenting the content. In this technique, individual slides are built up by the gradual layering and overlapping of information within a single slide: the audience seems to be following the mental path of the speaker. This strategy is, expectedly, reflected in the low periodicity of one slide in these papers – 68 and 38 seconds per slide.

Total number of visuals (7 CPs)	158
Average number of slides per CP	23
Min. and max. number of slides per CP	10 / 53
Average frequency of slide projection per sec	67
Min. and max. frequency of projection per sec	38 / 114

Table 1: Quantitative characteristics of the visuals surveyed

Another finding is closely related with the function of the visual images as 'visual coding devices' for the audience. In the data surveyed, the most significant coding device or strategy is the use of colour: 56 per cent of the visuals in the data are black and white (BW) (44% in colour). The ratio of BW to colour in my data does not support Rowley-Jolivet's (2002) proportion of 65 per cent of

images in colour versus 35 per cent of BW in her data (though the difference is not a dramatic one). If we ignore the use of colour as an attention-seeking and interactional device, the more extensive use of colour in the hard sciences might be attributed to the nature of the phenomena observed (especially in geology and medicine). In the soft sciences investigated here, however, the phenomena observed are less frequently the focus of research; rather the nature of data presented e.g. in applied linguistics is highly textual in nature, and the image-like visuals are mainly graphs, charts and other raw-data projection devices.

As suggested in Section 2, modality is communicated not only through traditional linguistic patterns, but also through non-linguistic systems such as visual communication. Kress and van Leeuwen (2006) thus treat colour as a non-linguistic expression of the modality of visual communication. However, to decide what counts as 'real' depends on "how reality is defined by a particular social group" (2006: 158). From this it follows that 'realism' is closely bound up with the particular community of practice, in our case the academic discourse community; this community follows its own rules, under which the so-called scientific realism differs conceptually from real-world or naturalistic realism (i.e. the way the world appears to us). If we agree on the fact that colour works as a marker of naturalistic modality, then a photograph that is in sharp focus with saturated and differentiated colours is expected to have higher modality than a BW diagram in science. This means that in the 'real world' more colour usually signals a higher degree of modality. In science, however, reality is defined "on the basis of what things are like *generically* or *regularly*" (Kress & van Leeuwen 2006: 158). This is the starting point for scientific realism, and 'scientific modality': the less colour, the higher the modality. In science (and academic speech), then, the use of colour may be interpreted as an important interactional strategy when addressing (live) audiences. Any social group or community has its own coding orientation; academic or scientific discourse communities rely on 'abstract coding orientation': "modality is higher the more an image reduces the individual to general, and the concrete to its essential qualities" (ibid.: 165). BW images are thus interpreted as expressing the highest level of factuality and credibility because BW code orientation facilitates the reading of complex data, abstracted and redefined from 'reality.'

Despite the variation in the classifications of visual images, it is now generally agreed that visuals fall into two classes: monosemic and polysemic. 'Monosemic' (graphical) images (cf. e.g. Kress & van Leeuwen 2006, Lemke 1998, Rowley-Jolivet 2002) include diagrams, graphs and maps, and present the meaning as conceptual, constructed and encoded in advance in the given field. 'Polysemic' (figurative) images are various kinds of photographs, which, due to their iconic

character, invite various readings and interpretations. Drawing on the view that the "two basic categories, Graphical and Figurative, however, do not exhaust the different types of visuals actually observed" (Rowley-Jolivet 2002: 27), here I use the category of 'scriptural' visual images, which resemble (or simply are) texts and which abound with a number of discourse-organizing functions; and 'numerical' visual images, which belong to the mathematical semiotic systems: these visuals are not present in the data in their pure form.

Visual	**% (out of total 158)**	**Example**
Scriptural	71.4	Title of paper – author – affiliation (funding, grant logo); aims – methods – materials; conclusion (+ aims revisited); references (+ data sources); 'goodbye' phrase
Graphical	0.6	Graphs, abstraction diagrams, modelled images, pie charts
Figurative	9.5	Photos of phenomena (in one CP on memes); photos accompanying 'goodbye' phrase – 'popular imagery'
Numerical	0	–
Hybrid: S/G	8.3	Graph composed of text
Hybrid: S/F	8.9	Photos + inserted/accompanying commentary
Hybrid: S/N/G	1.3	Statistical table + commentary

Table 2: Overall distribution of visuals

Table 2 shows the distribution of the types of visuals: these comprise four main classes and three hybrid classes, defined on the principle of combining two (or even three) dominant types of visuals. The most significant finding of the research is that 71.4 per cent of the visuals are scriptural, almost three quarters of the total; this proportion is far higher than in Rowley-Jolivet's (DATE) data for the same class (23%). This finding suggests that occurrence is field-specific, as applied linguistics takes (in most cases) texts as the object of study. As can be seen from the examples given, their main function is to serve as discourse structuring devices, as they visually 'organize' the propositional content – which is either purely scientific content (when stating aims, methods, materials, conclusions, references and data sources), or essentially non-scientific content (when stating the title of the paper, the author or his/her affiliation, the 'goodbye' phrase, etc.). This role of scriptural visuals involves both the ideational metafunction

(i.e. conveying content) and the interpersonal metafunction (such visuals are strongly metalinguistic, helping the audience to find their bearings in the densely ideational discourse). From this perspective, and parallel to the related genre of the research article, such a discourse-structuring role of scriptural visual images overtly imitates the Introduction-Methods-Results-and-Discussion (IMRD) pattern – i.e. the ideal rhetorical structure typical of written academic research-process genres. Put simply, the scriptural visuals in the data play the role of textual paragraphs. Rowley-Jolivet (2002: 30) elaborates on the structural role of scriptural visuals in her data, concluding that the scripturals act as "'framing devices' (the first and last visual in the talk), 'closing devices' (the conclusion in verbal form), and 'boundary devices' (the visual signals the onset of a new section)" – these are absent in my data. To sum up, the scriptural visuals act as a form of mental condenser, combining both cognitive and rhetorical or structural information. In Table 3 and 4 below we can observe two variant forms of the structural role of scriptural visuals (and the verbal commentary accompanying slides): in slide 2 (Table 3) the author offers the frame of the talk – he/she is clearly defining the aim of the research and the structure of the talk. In slide 15 of the same talk the author draws some conclusions based on the aims set in slide 1. Both slides are representing what Rowley-Jolivet (2002: 37) refers to as "visual 'paragraphs'".

Slide	Presentation Text	Verbal Commentary
2	**Introduction** • **Objective –** to grasp and analyse the messages contained within such English and Polish women proverbs/quotations which operate positively for women, either through: 1. conveying direct positively-charged meaning or 2. valuing women favourably in some aspect, through the implied meaning. • **Organisation -** **The initial part –** the results of the author's analysis on women proverbs carried out so far (xxx 2012a,b) **The following parts –** a pilot study of selected categories and exemplary English/Polish proverbs/quotations that may be said to contain **positive views and contexts related to the female kind.**	, er thus the objective of my er presentation is to grasp and analyse er the messages contained within such english and polish women oriented proverbs and quotations which operate positively for women either through conveying er direct positively charged meaning or the ones which at least value women favourably in some aspect that is through the implied meaning , er as including in the title er the analysis covers two languages two unrelated languages that is er english er belonging to the germanic group of languages and …
15	**Conclusion** • grandmother category – depicted much more frequently in the English language • contrary to the English language – no obvious Polish proverb which might directly indicate the changing role/status of women • some proverbs/quotations, in the opinion of men, might seem clearly sexist to the male kind, e.g. A woman's guess is much more accurate than man's certainty **GENDER BALANCE will come when we do not use these stereotypes and generalisations at all!!!**	ok and a few points to to make er erm conclusion grandmother category as you could see is depicted much more frequently

Table 3: 'Visual paragraphs' in talk 1 (BKH01)

A similar strategy can be observed in Table 4 where the author gradually and systematically elaborates on three 'textual topics' outlined in slide 9 labelled 'Structure'. This slide, however, does not occur at the beginning of the talk, but follows an introductory sequence of eight slides discussing some key concepts. Slide 9 then functions as a useful signpost to the content of the talk – it marks the boundary between the two parts; slide 15 elaborates on the textual topic 1 'social context of the interaction' which is still part of a theoretical background

while antagonistic/supportive facework are analytical categories summed up in slide 50.

Slide	Presentation Text	Verbal Commentary
9	**Structure** 1. Social context of the interaction 2. Antagonistic facework – face attacks 3. Supportive facework	er so what am i going to talk about firstly i'll briefly introduce you to the social context of the discussions that i'm analyzing then i'll be looking at antagonistic facework and then briefly at the end a little bit about supportive facework to (xx) out
15	**Social context of the interaction** **In-group** **out-group** (experts) (non-experts, anti-experts) **core values (face components):** free-thinking, anti-establishment, anti-elite, ordinary folks It's a total waste of time listening to all this expert advice … Those who can, do. Those who can't, get first class degrees, and become "experts".	they often say things like that these are quotes from discussions yeah so they will er discredit or tempt to discredit the experts by saying that well these experts don't really know anything and it's just a waste of time er now of course as i already hinted
50	**Conclusions** Individual face AND group membership – discourse communities • Antagonistic discourse – deepens existing divisions (anonymity vs. face-to-face discourse) Supportive facework – strengthens in-group cohesion and social harmony • Heightened intensity compared with FTF discourse	er however er there is also supportive facework strengthening ingroup cohesion strengthening committee or social harmony now this this's also been researched on this which has suggested that a lot of this feeling of being similar to your fella or members is actually an illusion because in reality we're all different and we've different er views on life and interest and so on when community comes together just to debate one topic essentially then that highlights what they have in common and what they won't have in common is not in the part of the discourse er so a lot of this feel of community is probably illusive er so the final conclusion is this

Table 4: 'Visual paragraphs' in talk 2 (CHH02)

Figurative visual images in the present data gain 9.5 per cent, a number relatively low for the hard sciences in Rowley-Jolivet's data, but quite relevant in the applied linguistics here where photos of phenomena under the study are rather rare. In my data, most figurative images occur in just one of the papers (80% out of all photos), which deals with the linguistic analysis of memes; several photos are used as a background image against which the so-called 'goodbye' phrase is projected, and it is positioned as the very last slide. This type of visual has nothing in common with science and research itself; Rowley-Jolivet (2002: 29) refers to a similar phenomenon in her data as 'popular imagery' and she interprets it as showing 'the human side of science'.

Both types of hybrid visual images (the occurrence of 1.3% is treated as statistically insignificant) perform the role of a functional counterpart to the figurative images; the hybrids are represented by a balanced combination of photos and accompanying commentary: this occurs when one image/chart/diagram is laid on top of another, such as a text being superimposed on an image.

6 Conclusion

On the one hand, conference presentations represent an established and relatively conventional academic research-process genre. On the other hand, what makes the genre highly 'unconventional', fluid, variable and dynamic are its aspects which are closely related with the visual channel of communication. Conference presentations are multimodal: they are a platform where several semiotic resources meet and interact: (non)verbal, visual, or audio-visual. The visual images in the data do not act as mere accompanying and spontaneous sets of verbal/graphic data or objects; as the research suggests, the visuals in the corpus are used intentionally in order to perform specific functions. In a highly propositional type of discourse (to which CPs belong), visual images inevitably convey propositional content, i.e. ideation, and at the same time they help structure the discourse so as to facilitate information transmission. This aspect of mutually assisting interaction between the speaker and the audience, which is an integral part of the interpersonal semantic component of language, seems to be a seminal constitutive feature of the genre. This character of the discursive features, with the verbal semiotic resource both controlled by and also instrumental in meeting the cognitive, functional and structural requirements of the genre, lies behind the special lexico-grammatical design, grammar or 'landscape' shared and expected by the esoteric audience.

Note

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2. For the transcription of the data see the ELFA corpus Transcription Guide <http://www.helsinki.fi/englanti/elfa/ELFA_trancription_guide.pdf>

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