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International conference paper presentations: A multimodal analysis to determine effectiveness



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ABSTRACT

International conference presentations represent one of the biggest challenges for academics using English as a Lingua Franca (ELF). This paper aims to initiate exploration into the multimodal academic discourse of oral presentations, including the verbal, written, nonverbal material (NVM) and body language modes. It offers a Systemic Functional Linguistic (SFL) and multimodal framework of presentations to enhance mixed-disciplinary ELF academics' awareness of what needs to be taken into account to communicate effectively at conferences. The model is also used to establish evaluation criteria for the presenters' talks and to carry out a multimodal discourse analysis of four well-rated 20-min talks, two from the technical sciences and two from the social sciences in a workshop scenario. The findings from the analysis and interviews indicate that: (a) a greater awareness of the mode affordances and their combinations can lead to improved performances; (b) higher reliance on the visual modes can compensate for verbal deficiencies; and (c) effective speakers tend to use a variety of modes that often overlap but work together to convey specific meanings. However, firm conclusions cannot be drawn on the basis of workshop presentations, and further studies on the multimodal analysis of 'real conferences' within specific disciplines are encouraged.

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1. Introduction

Carrying out an effective academic oral presentation at an international conference is a matter of using a variety of modes, that is, ways of representing and communicating meaning (Kress, 2003), so as to be understood and appreciated by a multicultural audience. In recent years, since multimedia packages have become commonly used by conference speakers who use English as a Lingua Franca (ELF), it appears that having the ability to orchestrate semiotic resources or modes such as images, writing, layout, sound, gestures, speech and 3D objects (Kress, 2010) may be more important than just having a good command of the spoken language or verbal mode. Developing a multimodal communicative competence, that is, the ability to understand the combined potential of various modes for making meaning so as to make sense of and construct texts (Royce, 2002) should be the top priority for international communicators and their trainers.

The advent of the digital era and the pervasiveness of technology have broadened our view on language and how it is regarded in the academic world. Due to the fact that the tools for communication in the twenty-first century have increased in

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their degree of multimodality, defined by Kress and Van Leeuwen (2001, p. 20) as "the use of several semiotic modes in the design of a semiotic product or event", academic genre studies have started to take on other dimensions. In other words, our cultural artefacts include numerous modes of representing and communicating meaning. Therefore, it is no longer enough to take into account the written or spoken texts and their underlying meanings. We now need to examine, in so far as oral presentations are concerned, not only how the verbal mode is produced and perceived, but also the written, the non-verbal material (NVM) and the body language modes that characterize the diverse mediating tools and resources that we use in present-day conferences.

In this study, I explore the contributions of the different semiotics (i.e., spoken and written English, non-verbal material and body language modes) used in conference presentations to the success of English as a Lingua Franca (ELF) speakers. For this purpose, I provide a model (see Figure 1), based on Systemic Functional Linguistics (SFL) and multimodality, to describe what and how communication takes place in a presentation. As is explained in the study, this framework is implemented in an ELF workshop for mixed-disciplinary academics to raise awareness of the academic presentation genre, to establish evaluation criteria, and to carry out a multimodal analysis of four presentations – two from the technical sciences and two from the social sciences. Before proceeding with the study, I will review some of the most relevant resources and studies that have been essential to establish research-based principles to teach and to evaluate academic oral communication in general. Then, I refer to the research that focuses on the oral use and pedagogy of English for international contexts, and finally I direct attention to the few recent studies that have taken a multimodal approach in exploring oral paper presentations.

Although the analysis of scientific academic discourse has focused more on written than on spoken research genres (Lynch, 2011; Rowley-Jolivet, 2002), in the past decade there have been an increasing number of spoken academic discourse studies. This proliferation of research on oral aspects is largely due to the availability of online spoken academic corpora, such as the Michigan Corpus of Academic Spoken English (MICASE) (http://quod.lib.umich.edu/m/micase/), the British Academic Spoken English Corpus (BASE) (www2.warwick.ac.uk/fac/soc/al/research/collect/base/) and the more recent English as a Lingua Franca in Academic Settings (ELFA) project (www.helsinki.fi/elfa).

MICASE and BASE provide large corpora of academic spoken language in English-speaking universities, and have been particularly useful to explore the oral discourse of the academic world in American and British universities. Studies stemming from either (or both) of these two academic corpora have focused mostly on lecturing or classroom talk (e.g., Chang, 2012; Deroey, 2012; Deroey, 2012; Deroey & Taverniers, 2012; Lee, 2009; Lin, 2010; Nesi, 2012).

In contrast, the ELFA Project at the University of Helsinki aims to offer an empirical basis to understand how English is being used internationally as the global lingua franca, or contact language, by people who do not share a common language and who far outnumber native speakers. According to Anna Mauranen, the director of the project, ELFA was developed in response to the need to find principled ways of teaching and assessing successful spoken communication in English for international use. Mauranen, Hynninen, and Ranta (2010, p. 184) claims that for applied pedagogical purposes, "it is top priority to analyse successful language use", so as to determine what to focus on in terms of successful discourse strategies in ELF circumstances. She also claims that ELFA will help to answer the question, "What do effective ELF users do as lecturers, supervisors, students or research group members?" (and, I would add, as presenters). Thus, in the coming years we can expect from ELFA a broad range of investigations, much like we have received from MICASE and BASE, but with a focus on the use of ELF for international communication.

Other spoken academic discourse studies having to do with ELF, or English as a Foreign Language (EFL) have also concentrated more on lecture discourse (e.g., Bjorkman, 2011; Crawford Camiciottoli, 2004; Flowerdew, 1994; Miller, 2002; Morell, 2004, 2007a) than on paper presentations. Nevertheless, in the past decade, along with the groundbreaking edition of *The Language of Conferencing* (Ventola, Shalom, & Thompson, 2002), a number of studies have begun to explore the characteristics of oral presentations for international communication, and the challenges faced by ELF academics. Some have analysed diverse linguistic and paralinguistic aspects of the verbal mode, such as pitch variation and its effects on engaging the audience (Hincks, 2005), L2 speech rate and the reduction of ideational content (Hincks, 2010), interactive features (e.g., personal deictics and markers) and their role in building rapport (Vassileva, 2002; Webber, 2005), information packaging and syntactic behaviour between NS and NNS (Rowley-Jolivet & Carter-Thomas, 2005), questions and answers in discussion sessions after presentations (Webber, 2002), or research cultures and the pragmatic functions of humour (Frobert-Adamo, 2002; Reershemius, 2012).

The visual mode of presentations has also received attention and, interestingly, Dubois (1980), which might be considered the pioneer study, was published in the first issue of *English for Specific Purposes*. This preliminary study already highlighted the meaning-making potential of slides and pointed out how visuals can stand alone or accompany texts depending on the speaker's intentions while carrying out the presentation. More recent studies on the use of visuals (e.g., images, tables, graphs, diagrams, charts, etc.), or what may be called non-verbal-materials (NVM), in presentations (e.g., Rowley-Jolivet, 2002), have found a wide range of meaning-making strategies to structure discourse and to express logical relations, which play an important role in facilitating communication, especially for international speakers and audiences.

Besides the academic presentation studies that have focused exclusively on the verbal (speech) mode or on the visual (NVM) mode, some have investigated the combination of, at least, two modes. For example, Charles and Ventola (2002) analyse the video-recordings of a presentation and focus on the switching of modes between speaking from a written text and commenting on a photographic slideshow. They find that the slides with images in the presentation of their study (taken from a conference from the humanities) are embedded as illustrations, while those from other conferences of the physical sciences function as evidence providers. Tardy (2005) considers how the writers' uses of various verbal and visual expressions

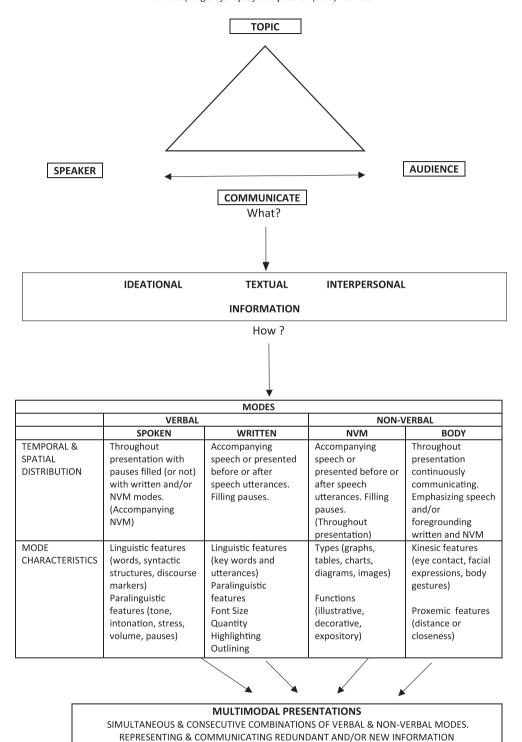


Figure 1. An SFL and multimodal framework for conference presentations.

in their Microsoft PowerPoint presentation slides project disciplinarity and individuality according to their experiences and personal reactions. In a similar fashion, Zareva (2013) examines the interplay between typical written academic genres and the oral presentation, and notes that in their successful presentations TESOL graduate students stay close to the norms of the written genres to project their scholarly selves, while also providing a glimpse of their social and personal selves. Wecker

(2012) and Rowley-Jolivet (2012) investigate the combination of oral speech and written information on slides, the former in a learning context and the latter in science conference presentations. Wecker (2012) finds that concise slides with limited information of the exposition have positive effects on the audience's retention. Rowley-Jolivet (2012) demonstrates through a science conference presentation corpus that slides contain highly condensed expressions while the presenter's commentaries are much more extended. Furthermore, Hood and Forey (2005) have performed what they term a multimodal analysis of interpersonal meaning by considering the role of gesture (body language mode) that co-occurs with speech (verbal mode) in the set-up stage of five conference plenary presentations. Although no attention is given to the evaluation of effectiveness, they argue in favour of modelling and deconstructing the discourse to see how connections between speakers and audiences are intensified or diminished. Similarly, Querol-Julián and Fortanet-Gómez (2012), explored the multimodal discourse in the discussion session after a presentation to examine how the speaker uses the verbal (i.e., linguistic and paralinguistic) and the body language modes (i.e., gestures, facial expressions and head movements) to express evaluative interpersonal meaning. They find that the non-linguistic features play an important role in intensifying the evaluative discourse and in expressing the speaker's attitude. However, most importantly and from a Systemic Functional Linguistic (SFL) perspective, these studies have begun to shed light on the complex nature of the multimodal rhetorical strategies employed by academic speakers to convey ideational, textual and interpersonal meanings.

Thus far, besides the aforementioned studies, much research in multimodality has taken place within primary or secondary level teaching contexts, especially within science classrooms (e.g., Jewitt, 2008; Kress, Jewitt, Ogborn, & Tsatsarelis, 2001; Royce, 2002; Tang, 2013). Nevertheless, whether the studies are situated within classrooms or conferences, they all contribute to the fact that "it is no longer possible to understand language and its uses without understanding the effect of all modes of communication that are co-present in any text" (Kress, 2000, p. 337). In addition, these investigations have proven that exploration of the use and combination of modes has the potential to inform teaching and training practices.

Through this study, I also intend to contribute to multimodal pedagogy by following through with the recommendation of the ELFA project of analysing successful language use, so as to determine what to focus on in terms of multimodal discourse strategies for ELF presenters. Unlike previous work on multimodality in presentations, this study takes a more holistic view by exploring the use of the verbal, written, non-verbal material (NVM) and body language modes, as well as the combination of modes (i.e., multimodality) in four workshop presentations, to determine what aspects they have in common that contribute to their success. Second, it reports on interviews with the presenters to obtain insights as to their beliefs on what made their presentations effective and whether paper conferences are intercultural or disciplinary-specific genres – a topic which has been dealt with in written genres (e.g., Dahl, 2004; Mauranen, 1996) but very little in spoken genres (e.g., Rowley-Jolivet, 2002; Ventola et al., 2002). However, first we present a framework of conference presentations based on SFL and multimodality (Figure 1) that was used in the present study to enhance awareness of *what* and *how* communication takes place in conferences, to establish evaluation criteria for presentations, and to carry out multimodal discourse analysis of successful talks.

2. An SFL and multimodal framework for conference presentations

At an international conference, regardless of the disciplinary field, there is inevitably a broad topic that defines the particular area(s) of study for which speakers present their work (i.e., the field in SFL). Therefore, the academics whose paper proposals have been accepted need to prepare their presentations for the specific audience they are likely to have. Speakers may be well advised to find out as much as possible of the foreseen audience (e.g., level of expertise, cultural and linguistic background), so as to better prepare what and how they are going to present. The what is not only the specific content or work they are presenting, that is, the ideational content, but also its organization, that is, the textual content, as well as the interpersonal content, which very often comes down to the way the speakers will demonstrate their attitude towards the topic and the audience, as well as the distance or closeness they wish to maintain (i.e., the tenor in SFL). On the other hand, the how, is the choice and particular use of the verbal (spoken and written) and NVMs and body language modes.

As experience has taught us, non-native speakers who are preparing to present at an international conference are often apprehensive primarily about the verbal mode – *what* they will say and *what* they will write on their slides in English. They worry about the expression of the ideational content, which, in most cases, deals with their area of expertise. In addition, ELF academics, who are not experts in linguistics, are very often unaware of the potential of the verbal modes (spoken and written) and the non-verbal modes (NVMs and body) to communicate textual and interpersonal information. Consequently, presentation trainers will certainly help their trainees if they make them more aware of the affordances of the four modes of communication, that is, their potentialities in terms of how modes can express, represent or communicate (Kress, 2010), not only ideational, but also textual and interpersonal meaning.

2.1. The affordances of the modes of communication

a) The spoken mode – The potentialities of the spoken mode, i.e., the linguistic and paralinguistic features, as indicated in Figure 1, are temporally distributed throughout oral presentations. The linguistic features of the spoken mode allow speakers to articulate and connect the chosen words and syntactic structures that make up the meanings they wish to express. Whereas, the paralinguistic features, e.g., tone, intonation, and stress, can indicate their attitude towards the

topic and the audience; their intention of affirming, exclaiming or questioning; their emphasis on key words or ideas,

- b) The written mode On the screen,¹ much like the spoken mode, the written mode represents the key lexicogrammatical features that can guide both the speaker and the audience throughout the talk. In multimedia presentations, the written utterances usually accompany or support the verbal mode, and they often reiterate, in a condensed manner (Rowley-Jolivet, 2012), the spoken information and may appear simultaneously, before or after the spoken words. Many of the affordances of the spoken mode are reinforced by those of the written mode by, for example, presenting the key words and utterances in diverse font sizes and colours or by using highlighting or outlining techniques (e.g., boldfacing, or showing bulleted points simultaneously or successively). These latter features may be considered written paralinguistic features.
- c) Non-verbal materials mode NVMs, according to Moreno and Mayer (2007), are pictorial representations of knowledge, e.g., graphs, tables, bar charts, images or videos. This mode, much like the written mode, may accompany or support the verbal mode, especially if it acts to illustrate what is being said (Charles & Ventola, 2002). For example, if a process is being explained, a graphic representation such as a flow chart may be used to enhance the verbal elaboration. However, in some hard science presentations, NVMs may act as the main mode of communication (see Sionis, 1997), and therefore take on an expository or evidence-providing role. Similarly, in other disciplines, especially of the soft sciences, an NVM such as an image may be decorative or used to contextualize what is being said at the moment, e.g., the image of an author, whose work is being studied. Thus NVMs, besides being ideational, organizational and interactional tools (Rowley-Jolivet, 2002), can be used for at least the following rhetorical functions: illustrative, expository and decorative.
- d) The body language mode Due to the permanent presence of the speaker in any face-to-face presentation, the temporal and spatial distribution of the body language mode can be said to be omnipresent. Through kinesics (i.e., eye contact, facial expressions and body gestures) and proxemics (i.e., closeness or distance, movements in space) speakers may create a specific rapport with the audience, express their attitude towards what, and to whom, they are communicating, as well as intensify their evaluative stance (Querol-Julián & Fortanet-Gómez, 2012).

Thus far, we have examined the affordances of the four modes separately, albeit superficially. However, for ELF speakers who wish to carry out effective multimodal presentations, it is not enough to merely know the differences between modes; they must also be shown how to vary and combine their verbal (linguistic) and non-verbal (non-linguistic) realizations (Ventola, 2002, p. 17). As indicated at the bottom of Figure 1, multimodal presentations consist of simultaneous and consecutive combinations of the verbal and non-verbal modes. The diverse combinations or orchestration of modes serve to present meaning redundantly or to progress with added information about the content, its organization or its connection with the audience.

This SFL and multimodal framework for presentations explained above (Figure 1) has been used for mixed-disciplinary ELF academics taking part in a workshop to help prepare for conference talks. As will be shown later, it was used to enhance their awareness of *what* and *how* communication takes place in conferences and to establish criteria for the evaluation of presenters' multimodal talks. In the present study it guided our multimodal analysis of successful workshop performances, and, hopefully, will be useful for further studies in 'real conferences'.

3. The study

This small-scale qualitative study attempts to take a more holistic view on multimodality in presentations by exploring the use of the verbal, written, NVM and body language modes, as well as the combination of modes, in four workshop talks, to determine what aspects they have in common that contribute to their success. We will begin by describing the context of the study and the instruments used.

The data of the present study was taken from the 2011 session of the Academic English for Teaching and Presenting workshop for ELF speakers that takes place yearly at the University of Alicante. Each year a group of 20 mixed-disciplinary academics take part in a 20-h course designed to help them present an effective talk at international conferences in English. The workshop, as described in Morell (2007b) has two major parts. The first half aims to raise the ELF participants' awareness of the characteristics of the multimodal presentation genre by having them participate in tasks based on the affordances of the modes of communication used in conference presentations (described above). In the second part, they are asked to prepare a 20-min oral presentation on a topic from their field, preferably one which they have the intention of delivering at a 'real conference', but prepared for the mixed-disciplinary ELF audience. These talks, which are video-recorded for research purposes, and their accompanying slides are co-evaluated by workshop participants using the grids found in Tables 1 and 2.

To obtain a holistic view of the use of multimodality and to begin to explore the characteristics of effective presentations (in a workshop scenario) the following instruments were used:

¹ Although the written mode in presentations can also refer to the accompanying handouts, which many speakers give to their audience as supplementary material, here we only consider what may appear on slides.

Table 1SFL evaluation grid for presentations (the *what* of the presentation).

	<u> </u>
IDEATIONAL	What was the topic of the presentation? Was there a clear aim? What was done in the study? What was found?
	What was concluded?
TEXTUAL	How was it organized? Were you able to follow?
INTERPERSONAL	Were you able to relate to the topic? Did the speaker involve you or connect with your experience or knowledge?

- a) evaluation grids (Tables 1 and 2) based on the model of SFL and the affordances of the modes of communication (Figure 1)
- b) a multimodal analysis of two video-recorded technical science and two social science presentations
- c) semi-structured interviews to find out about speakers' language levels, presentation experience, and the idiosyncratic features of conferences in their specific fields.

3.1. Evaluation based on SFL and multimodal affordances

The evaluation criteria to measure the effectiveness of oral presentations used in the workshop, and which I propose for further studies on 'real conferences', takes into account SFL (to measure the efficiency of *what* is conveyed) and the potentialities of the modes of communication (to rate *how* it is communicated). As indicated in Figure 1, *what* is actually communicated in presentations concerns ideational, textual and interpersonal information. Thus, to identify an effective talk, it may serve to ask the audience if they could answer the questions in Table 1.

If the audience for which the presentation has been prepared is able to answer these questions (affirmatively, in the case of the polar questions), it will almost certainly be an effective talk. On the other hand, to examine *how* the information was communicated we may use the following evaluation grid (Table 2), which is based on the affordances of the spoken, written, NVM, body language and multiple modes (Figure 1).

The modes that can be used by speakers are found in the left column and the modalities or sense systems through which the audience receives the material (i.e., auditory and visual) are in the right column. The central column includes some of the mode and multimodal features that can be rated on a scale of 1 (low/poor/inappropriate) to 3 (high/good/appropriate).

Table 2Multimodal evaluation grid (the *how* of the presentation)

MODE used by speaker	FEATURES (rated 1–3) $1 = low$, $3 = high$	MODALITY (used by audience)
SPOKEN	LINGUISTIC	AUDITORY
	key words (stressed)	
	syntactic structures (accurate)	
	discourse markers	
	PARALINGUISTIC	
	volume	
	speed	
	pronunciation (intelligible)	
	Intonation	
	tone	
WRITTEN	LINGUISTIC	VISUAL
	key words (stressed)	
	syntactic structures (condensed)	
	PARALINGUISTIC (FONT FEATURES)	
	font size	
	font style	
	colour (contrast between background and lettering)	
	appearance in time (of words, utterances, slides)	
	quantity per slide	
NVM	choice (serve purpose)	
	design (clear)	
	transparency (understandable)	
BODY	KINESICS	
	eye contact	
	gestures	
	posture	
	PROXEMICS	
	distance/closeness	
	movements in space	
MULTIMODALITY	orchestration (well combined)	AUDITORY & VISUAL
	transitions	
	redundancy	

This assessment grid was implemented in the Academic English for Teaching and Presenting workshop, where the participants were put into rotating groups responsible to evaluate one of the modes of their peer's talk. After each performance, the instructor and the group responsible for a mode gave their constructive comments on the way the speaker had made use of the affordances of the particular mode. It was also used by the instructor (the author of this paper), to support the multimodal analysis of two of the more successful Technical Science (labelled TS1 & TS2) and two Social Science (SS1 & SS2) presentations. Although most of the participants were able to perform well, for the purposes of this study, I chose to look at these particular four because of their disparity in fields, language levels and experiences. I believed these talks would allow for further insight into which modes predominate in the hard and soft sciences, if and how verbal deficiencies can be compensated by visual modes, and how experienced speakers combine modes.

3.2. A multimodal analysis of two video-recorded technical science and two social science presentations

The video-recorded versions of TS1, TS2, SS1 and SS2 were carefully analysed to have a close look at aspects of: (a) the verbal mode; (b) the written mode; (c) the non-verbal material (NVM) mode; (d) the body language mode; and (e) the combination of modes (multimodality).

- a) The verbal mode was examined first to determine the paralinguistic (i.e., tone, intonation, pronunciation, stress on key words, volume, speed, etc.) and the linguistic aspects, such as the use of discourse markers, which played an important role in the effectiveness of the talks.
- b) Secondly, the written mode found on the projected slides was taken into account to see if there was contrast between background and lettering, an appropriate use of font size, number of words per line, number of lines per slides, and to note how and when the text appeared on the slides.
- c) Thirdly, the quantity and quality of the NVMs used (i.e., the graphs, charts, tables, diagrams and images) were considered to determine what purpose they served (illustrative, expository or decorative) and to see if they contained items that facilitated their interpretation (e.g., explicit keys and labelled variables).
- d) Finally, the speaker's body language was observed to take note of their eye contact, gestures, hand movements and body positions in relation to the talk and the audience.

Once each of the separate modes had been examined and annotated separately, the videos were viewed again to check the sequential use of modes and to determine if there were specific patterns of consecutive or simultaneous use.

The multimodal analysis described above was preceded by semi-structured interviews with the four speakers (TS1, TS2, SS1 and SS2). The speakers were asked about their competence and use of the English language, as well as their experience and beliefs in carrying out effective oral presentations in English and in their mother tongue. In addition, they were asked if, in their specific fields, there were any set ways of giving oral presentations and if there was a difference in the manner in which those of their discipline gave talks at national and international conferences.

4. Results

A summary of the multimodal analysis of each of the presentations is found in Table 3, where the first column gives the abbreviated label for each speaker according to their discipline (TS1 = Technical Science 1, TS2 = Technical Science 2, SS1 = Social Science 1, SS2 = Social Science 2) and specific field. The following four columns, with the headings 'Verbal', 'Written', 'NVM', 'Body language' gather descriptive information that characterizes the speaker's use of the mode. The last column, 'Combination of modes', denotes the speakers' consecutive or simultaneous use of two or more modes, as well as any predominance that may have occurred.

All four began by greeting the audience and introducing themselves verbally, while in the background they had projected a slide with the title of their talk along with their names, affiliations and e-mail addresses. Three of the four (TS2, SS1 and SS2) announced their aim(s) through the verbal and written modes, and the same is true for the plan of the talk, which was both given orally and presented as bulleted text on a slide. Each then proceeded to attract the attention of the audience by asking questions, narrating an anecdote or showing an image. Extract 1 is taken from TS1 (min. 1.07 – min. 2.10) at the beginning of his presentation after having presented himself and the topic. It illustrates the succession of modes used, that is, the body language (position, eye contact and facial gestures in images captured from video), the written utterances on slides (in boldface) and the spoken utterances (in italics) at each of the given moments.

From Extract 1, we can appreciate not only the speaker's careful sequencing of modes (1st written utterance on slide, 2nd spoken utterances, 3rd next written utterance on slide, 4th spoken utterances, etc.), but also his continual interaction with the audience through his spoken elicitations and body gestures indicating his wish for their involvement.

In so far as the verbal mode is concerned, they all used intelligible pronunciation, appropriate tone and intonation, while some of them stressed key words more (e.g., TS2), and some made greater use of discourse markers than others (e.g., SS1).

² The intelligibility of a presenter's pronunciation is subjective, so that when I describe the four presenters' pronunciation as 'intelligible' and 'could all be understood with almost no difficulty', I am of course reacting as a listener who is a fellow speaker of their L1.

Table 3A multimodal analysis of 2 technical and 2 social science presentations.

Speaker (Discipline)	Verbal	Written (on slides)	NVM	Body language	Combination of modes
TS 1 (Computer Science)	Verbal elaboration on images and written bulleted text.	Clearly written aim, plan, summary of results & conclusions	22 slides – 12 with short written text (only key words and condensed structures) and 10 images (all illustrative)	Continuous eye contact with little movement of body position	Verbal after written or image. Consecutive or simultaneous use of modes
TS 2 (Civil Engineering)	Verbal used to accompany numerous NVMs. Much metatext to indicate procedures illustrated and explained on NVMs.	Clearly written aim, no slide for plan, but 5 introductory slides with NVMs. IMRD structure.	22 slides – 7 with text, 15 with NVMs (1 pie chart, 7 diagrams, 2 images, 1 line graph, 1 table, 1 combined diagram & table, 2 combined diagram & image (all expository)	Occasional eye contact with continuous focus on slide with pointer and highlighting techniques	Simultaneous use of NVMs and verbal mode. NVMs predominant throughout
SS 1 (Literary Studies)	Verbal with numerous discourse markers to elaborate interpretation of authors' views and work	3 point bulleted aim, background details in introductory slides, enumerated facts & interpretations in bulleted written text with key words only.	22 slides – 9 combined text & image, 7 with bulleted text, 5 illustrative and decorative images	Extensive use of hands and some indications to focus on screen	Verbal predominance with images in background and some consecutive use of written, verbal and image
SS 2 (Classical Latin & Catalonian)	Verbal introduction with no reliance on slides, made up of simple short sentences, followed by metatex to explain and compare diagrams and images of classical texts	Very little written text except for script on images.	28 slides – 11 with images of classical texts, 6 with a combination of short text & image, 5 with combination of diagram & image, 5 with short text, 1 with a diagram (all expository)	Started with continuous eye contact, later more on slides. Used hands for explanations and pointed on diagrams and images	Consecutive use of verbal and NVMs, reinforced continuously with body language.

Although they could all be understood with almost no difficulty, SS1 spoke rather quickly, and at times it may have been problematic to follow her spoken mode for some of the audience; however, in most instances her speech was accompanied by illustrative images and schematically written texts. In other words, the NVMs and the written modes made up for her verbal deficiencies. Similarly, TS2, a B1 level speaker of English (see Table 4), had quite a few inaccuracies and hesitations in his verbal explanations, but the explicitness of the NVMs and his indications (body language – pointing to or touching the screen) referring to the information on the slides compensated for understanding. Extract 2 is taken from the methodology section of TS2, when he is explaining how his research group gathered the data for their study. The flow chart that appears on the slide presents the resources of the data on the left, the data in the central boxes and the two methods used on the bottom right. In this case, the stressed spoken words are underlined.

Extract 2 exemplifies how a careful layout of the information on the slides and stress on key words, can support not only the speaker in communicating, but also the audience in understanding the intended message.

In most cases, the written utterances on the slides were concise, that is, they only used key words and condensed structures, often set up in a bulleted logical order or connected with arrows or simple diagrams. Similarly, the slides containing NVMs were clearly labelled and the most important features were usually emphasized by, for example, using boldface or a darker colour font, or clicking the pointer so as to either add or modify a visual image or written text. The highlighting, much like in Extract 2, was also brought about by the use of body language, especially when speakers directed their eye contact from the audience to the screen and simultaneously used the pointer (or their arms and hands) to signal certain parts of the slides or clicked to add to or modify what was being visualized. In addition, the four speakers ended with a concluding message on the second to last slide, which was shown and then explained before the title slide with their name, affiliation and e-mail address was shown once again, while they thanked the audience for their attention and invited questions.

Unlike the spoken and written modes for which the speakers shared many features in common, their body language was quite diverse. TS1, for example, a more experienced speaker (see Table 4), maintained continuous eye contact with the audience and stood in the same position, where everyone could see him and the screen throughout the talk (see Extract 1). He also nodded, smiled and used hand gestures to elicit from the audience and to reaffirm his statements. In contrast, TS2, who had less experience and a lower level of competence in English (see Table 4), used eye contact only occasionally and changed his standing position, according to what he was indicating on the right, centre or left side of the screen, which allowed the audience to know what he was referring to at each moment, but may have caused visual difficulty for some of the audience (see Extract 2). SS 2, another experienced speaker (see Table 4), used facial and hand gestures extensively, as can be observed in Extract 3, where he is describing the handwriting on the projected medieval manuscript.

Extract 3, taken from SS2 (an experienced speaker in his mother tongue), much like Extract 1 taken from TS1 (an experienced speaker in English), demonstrates that skilled presenters rely on their body language together with the other modes

Extract 1 TS1 (min. 1.07 - min. 2.10)



Web content grows very fast (1 min 7 sec)

Before starting, how many of you know what Twitter is? Raise your hands, please. (Audience raise hands) Yeah, ok. Most of you know, ah.



Twitter statistics (1 min 35 sec)

Well, as you know Twitter is a social network where people sends tweets or messages to the network which can be read (pronounced ri:d) for . . ah . . by anyone.



Tweets per day (2 min)

So, how many tweets per day or messages do you think the people is sending to the twitter network? ... Try to estimate, please. (Member of audience) One million

(TS1 laughs) Well, come on. This is too much? Or too low?

(Member of audience): Too low. 100 million (laughter from audience)



150 million (2 min 10 sec)

The real number is 150 million.

Table 4Speakers' English level and conference paper experience.

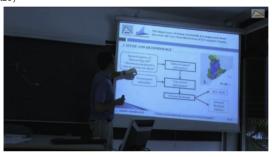
Speaker	TS 1 (Computer Science)	TS 2 (Civil Engineering)	SS 1 (Literary Studies)	SS2 (Classical Latin & Catalan)
Level of English (CEFR)	C1	B1	B2	B2
Conference paper experience (No. of presentations given in mother tongue)	2	3	10	15
Conference paper experience (No. of presentations given in English)	15	2	0	2

to convey their intended meanings. Nevertheless, the diversity in the speakers' body language is influenced, undoubtedly, by many factors, and its subtlety makes it an elusive and tangled skein mode to analyse, especially if we take into account cultural differences.

If we consider the speakers' use of multimodality, that is, the combination of modes, we may note the following patterns:

• a consecutive use of written and verbal modes to explain the concise text on the slides (common at the beginning and end of each presentation and throughout much of TS1, as illustrated in Extract 1);





(8 min 49 sec)
With that basis ... we have look for ... we have the time ... and meteorological <u>information</u> ... from that <u>sources</u> ... and we have apply ...



(9 min) secon next ... we have take information about the uses of the <u>soil</u> from government applications – <u>official</u> information . – OK?



9 min 20 sec

And with all this information we have obtain the $\underline{volume\ discharge}$ of the (inaudible) river by \underline{two} different methods

Extract 3 TS2 (min. 5.48 - min 6.15)



(5 min 48 sec)

The oldest manual is this one. We can see that in medieval manuscripts ... ah ... the people who were writing



(5 min 56 sec) Write fast



(6 min)

It's like us when we are copying notes for a class. It's the same



(6 min 5 sec)

We have to go fast. So they used to use these kind of symbols for going fast for writing all words all letters

- a simultaneous use of NVMs and verbal modes to facilitate the understanding of what was being shown (e.g., TS2, as illustrated in Extract 2);
- a consecutive use of verbal modes and NVMs to illustrate what was being said (found in the four cases); and
- a simultaneous use of verbal modes and NVM in the background to provide setting (e.g., SS2, as illustrated in Extract 3).

The main similarity between the two TS and the two SS presentations lies within the use of NVMs and verbal modes, respectively. While the TS talks relied more heavily on NVMs, the SS ones depended more on verbal modes. Although in all cases, the slides with their written text and NVMs were organizational, ideational and interactional tools (Rowley-Jolivet, 2002, p. 21), it would have been difficult to carry out the TS presentations without them. This is especially true for TS2 that reported on an empirical study with complex apparatuses, mathematical formulae and numerical tables, which Rowley-Jolivet (2002, p. 27) calls 'numerical visuals'. In contrast, SS1 and SS2 had higher concentrations of the verbal mode and their NVMs were more illustrative or decorative in nature.

In general, the four presentations were relatively easy to follow and each speaker took the audience into account. In other words, they were aware of the fact that a presentation is effective if the speaker is able to connect through the different modes with the listeners, who are able to capture the intended message.

4.1. Presenters' responses to interviews

The speakers' (TS1, TS2, SS1 and SS2) responses to the questions about their level of English and their experience giving paper presentations can be found in Table 4. The first row gives the abbreviated label for each speaker, according to their discipline and specific field. The following row indicates their English level according to the Common European Framework Reference of Languages (CEFR: A1, A2 – beginner, B1 – intermediate, B2 – upper intermediate, C1 – advanced) and the next two specify the number of times they had presented a conference paper in their mother tongue (Spanish and/or Catalan) and in English, respectively.

When the speakers were asked about their performances in the workshop talks, and why they believed the audience had rated them as effective, they all answered that their awareness of the modes of communication had helped them to better plan and prepare not only what they would say and write on the slides, but also how they would show it. TS1, who already had much experience in conferences (15), stated that in the past he had only been concerned with the words and phrases he would use in his speech, and had not realized the importance of the visual modes. TS2, who had a lower level of English, claimed that his higher reliance on visuals may have compensated for his verbal deficiencies.

The interviews also allowed me to obtain further insights about the speakers' specific fields with regard to their set ways of giving oral presentations, and whether there was a difference in the manner in which those of their fields gave talks at national and international conferences. Both TS1 and TS2 claimed that in their disciplines conference papers followed the written research article formats very closely. In other words, the typical IMRD (Introduction–Method–Results–Discussion; Swales, 1990) structural framework used in scientific written discourse to report research was adapted for the conference paper delivery. This was true, according to TS1, at both national and international conference contexts, in Spanish and in English. In addition, most speakers used multimedia packages (e.g. PowerPoint and LaTex) to aid their delivery. TS2 also mentioned that he noted differences between those who spoke English as a mother tongue and those who used it as an additional language. For example, many speakers of English as a first language started their talks with an anecdote or something that connected with the audience (e.g., talk about the weather or about the city or country where the conference was taking place), whereas this was seldom true for ELF speakers.

In contrast, SS1 and SS2 were not sure about having any specific organizational patterns for delivering papers in their specific fields of study. SS1, who did not have any prior experience giving a presentation in English, stated that in her experience with paper deliveries in Spanish she had noticed that many speakers brought written texts with them that were either read or at least used as notes to provide the audience with a more spontaneous speech. However, in more recent national conferences she had noticed that more speakers were beginning to use multimedia packages.

5. Discussion

As was stated at the start of this paper, the multimodal analysis of four effective workshop oral paper presentations was carried out to determine what characteristics they had in common to render them successful. From a functional systemic perspective, we might claim that the speakers' effectiveness was due to their use of concise ideational information, organizational textual features (e.g., discourse markers) and inclusive interpersonal devices (e.g., greetings and attention-grabbing techniques); whereas from a multimodal theoretical framework, we might state that they were able to use and combine the modes so that they could connect with the audience and communicate their intended message.

Thus, to determine what to focus on in terms of multimodal discourse strategies for ELF presenters, we could start by pointing out the metafunctional potential of each of the modes and their combinations (Figure 1). That is to say, academic speakers need to realize that their success in presenting a paper at a conference depends on their multimodal communicative competence, which entails the ideational, textual and interpersonal affordances of each of the many ways of representing and communicating meaning. This competence goes beyond the spoken and written words and includes, at least, NVMs and body language.

In so far as the combination and sequencing of modes is concerned, we have found that when speakers become more aware of the different modes of communication that they have available to them, they also begin to plan the effect of different sequences and the possibility of foregrounding specific modes at precise moments of their presentations. We have seen that the speakers chose a variety of modal combinations that were either of a consecutive or a simultaneous nature. The organization and progression of the presentations was often denoted by a consecutive pattern with bulleted short written propositions that were first shown and then spoken about before showing the next bulleted proposition. Thus, in these cases, the consecutive pattern was 1st written, 2nd verbal, 3rd written, 4th verbal (e.g., Extract 1 TS1). In those presentations where NVMs of a graphic nature were used, there was usually a simultaneous use of the verbal mode, body language mode and the NVM (e.g., Extract 2, TS2). In these cases, the different modes were being used to refer to the same information. This leads us to believe that effective speakers tend to use a variety of modes that often overlap but that work together to convey specific meanings. Consequently, a strategy that may be recommended is to use various modes to refer to the same proposition, and if the proposition is complex it may be a good idea to use the modes consecutively.

Nevertheless, this small-scale study based on four multimodal talks at a training workshop cannot establish any research-based multimodal rhetorical strategies to be employed by successful academic speakers. The findings from the multimodal analysis and interviews can only go as far as to suggest that:

- (a) A greater awareness of the affordances of the modes of communication, and their combinations, can lead to improved performances;
- (b) Higher reliance on the visual modes can compensate for verbal deficiencies; and
- (c) Effective speakers tend to use a variety of modes that often overlap but work together to convey specific meanings.

If we use the limited findings of this study to answer the question of whether paper conferences are intercultural or discipline-specific genres, we may conclude that there is a general difference between the social (or soft) sciences and the technical (or hard) sciences. On the one hand, some social sciences appear to have closer connections to national cultures, and at international conferences they may be considered intercultural genres. On the other hand, some technical or hard sciences make use of the well-established IMRD structural framework, and field-specific NVMs are widely used to communicate scientific discourse (see Rowley-Jolivet, 2002). Therefore, generally speaking, technical science paper presentations may be considered discipline-specific genres. Although we cannot make any firm statements based on our small-scale study, it appears to be that the pervasive use of technology and the growing use of ELF will, in time, lead to discipline-specific academic presentation genres in many of the fields of both the hard and soft sciences. Nevertheless, there is a need to do further research on paper presentations held at international conferences in the many different fields of the social and technical sciences to provide more evidence to determine if they can be considered intercultural or discipline-specific genres. To draw any conclusions, it would require a widespread survey of academics in the many diverse fields.

Thus, the many limitations of this study (i.e., a mixed-disciplinary workshop scenario, only four talk analysis, only four interviews, and no annotating tool) do not permit me to draw any firm conclusions with regard to the multimodal strategies used by effective speakers, nor to the question of whether conference presentations are intercultural or discipline-specific genres. However, it is hoped that the SFL and multimodal framework (Figure 1) used in this study may serve as a structural model for academic ELF presentation trainers and researchers. In the case of the former, it may help them to create materials and implement tasks that will enhance ELF trainees' awareness of mode and multimodal affordances. And, in the case of the latter, it may help them to plan to gather large corpora of 'real' conference presentations and carry out multimodal analysis of talks that are considered effective by their audiences (experts of the specific fields). These analyses would provide us with more reliable data if they made use of an annotating tool, such as ELAN as used and described in Querol-Julián and Fortanet-Gómez (2012). In sum, there is much to be done to shed light on the oral academic presentation genre in general, and more specifically on the multimodal strategies of effective talks.

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