

THE MULTIMODAL REPRESENTATION OF “IDEAS WORTH SPREADING” THROUGH TED TALKS

SILVIA MASI
UNIVERSITÀ DI PISA

Abstract – The slogan of TED talks reminds one of the overarching goals of this genre, i.e. to spread/share worthy ideas from different knowledge domains among the general public. The present contribution applies a multimodal perspective to the analysis of evaluation as a strategy used to shape such ideas in the talks. It actually takes into account a broad conception of evaluation as the expression of the speaker’s attitude or stance towards, viewpoint on, or feelings about what is being talked about (Thompson, Hunston 2000), which, in this textual genre in particular, tends to be imbued with a strong desire to cause or evoke a similar experience in the audience. The study focuses on quantitative and qualitative data on subjective (emotional and axiological) adjectives, gestures and visuals (content of slides) combining in ever more complex multimodal ensembles from a selection of talks in three different domains, in order to gain a more comprehensive insight into tedsters’ representations of their views emerging from the interactions of such resources. In fact, the findings show that the latter contribute significantly to the shaping of the proposed ideas as something worth listening to (and, ideally, endorsing). Also, they appear to display varied combinations across knowledge domains, thus pointing towards domain variation as a possible constraining factor responsible for the diversification of the multimodal rhetoric associated with the genre.

Keywords: evaluation; gestures; visuals; multimodality; knowledge dissemination.

1. Introduction

TED Talks (www.ted.com) is a hybrid knowledge dissemination genre allowing for synchronous and asynchronous access on the web, whose slogan reminds one of its overarching goal, i.e. to spread/share worthy ideas from different knowledge domains among the general public. Its popularity has grown considerably thanks to the technological developments of the last decades, especially within educational settings (see, for instance, Carney 2014; McGregor *et al.* 2016; Servinis 2013; Takaesu 2013; Wingrove 2017, along with several teaching resources such as Dummett *et al.* 2016 and TED-Ed, <https://ed.ted.com>), and several research strands have identified different features of the genre so far (Anesa 2018; Caliendo 2012; Caliendo, Compagnone 2014; Compagnone 2014; Laudisio 2013; Mattiello 2017, 2019; Rasulo 2015; Scotto di Carlo 2012, 2013, 2014a, 2014b, 2014c, 2015, *inter alia*). However, relatively little attention has been devoted to non-verbal resources (for some exceptions, see D’Avanzo 2015; Masi 2016, 2018, 2019; Meza, Trofin 2015; Theunissen 2014; Valeiras Jurado 2017; Valeiras Jurado, Caliendo 2018) despite the prominent role of some of them in the genre. In fact, the hypothesis underlying the present research is that important threads of meaning in (and correlated attractiveness and impact of) the genre largely rest on the interplay of the multimodal resources it exploits, which makes it necessary to develop a deeper understanding of its multimodal rhetoric.

Building on past and of ongoing research on TED and multimodality (cf. esp. Masi 2016; Scotto di Carlo 2015; Theunissen 2014), the present contribution addresses such a

gap by focusing on the phenomenon of evaluation (Thompson, Hunston 2000), which can be viewed as a strategy used to shape the noteworthy quality of ideas presupposed by the slogan of the genre mentioned above. Evaluation in TED has indeed been found to be part of rhetorical (verbal) techniques that establish trustworthiness on the basis of subjectivity and pathos (Scotto di Carlo 2015). The present study proposes quantitative and qualitative analyses of subjective adjectives (see 4.1), gestures and visuals (i.e. content of slides) especially when combining in multimodal ensembles (Kress 2010),¹ so as to gain a more comprehensive insight into tedsters' representations of their views.

From a methodological point of view, the study will cover a selection of talks given by native speakers of English from various knowledge domains, and reference will be made to Lazaraton (2004) for the integration of multimodal data. More specific frameworks of reference are also to be found in Scotto di Carlo (2015) for the analysis of lexis, Masi (2016) and Valeiras Jurado (2017) for the analysis of gestures, and Theunissen (2014) for the analysis of visuals.

A first section will introduce the composite theoretical background referred to, along with more specific research questions for the study. A second section will present the corpus and methodology of the research, followed by a section devoted to data illustration and discussion and by some concluding remarks.

2. Background

In her comparison of TED talks with traditional scientific presentations, Scotto di Carlo (2015) underlines the distinguishing role of subjective adjectives in the former, as a means to convey speakers' stance and audience engagement and persuasion. Indeed, not only does evaluation express the speaker's attitude or stance towards, viewpoint on, or feelings about what is being talked about (Thompson, Hunston 2000), but it also allows for speakers' alignment with their audiences (Hyland 2005) by promoting shared values and/or evoking a shared emotional experience in the audience, making them prone to react accordingly. Yet, in what ways is this more or less implicit invitation to sharing a given view, this 'projection of desired reaction' elicited beyond words? In order to give an answer to this question, I set out to replicate Scotto di Carlo's study on a smaller scale and as a starting point to consider evaluation from a multimodal perspective.

In fact, Valeiras Jurado (2017) undertakes a multimodal study of persuasion in TED Talks, conference presentations and product pitches on the basis of words, gestures, prosody and head movements, and highlights that the TED talks are the most modally and persuasively dense genre of the three taken into account. Different types of gestures, in particular, have been found to perform diverse functions in the talks, e.g. metaphoric gestures and beats with pragmatic and cohesive functions, mostly used for emphasis, as processing aids and to create rapport. Masi (2016), centred on gestures and their functions in TED talks, hinges upon a partly different and more specific classification and underscores the multifunctional quality of gestures, which, for example, may be beats, deictic or metaphoric with either referential or pragmatic (social, performative, parsing, modal) functions (Masi 2016, p. 150). To what extent can some such gestures be

¹ In the present investigation, such meaningful orchestrations of modes may include two modes (e.g. adjectives – as part of the verbal mode – and gestures), three (adjectives, gestures and visuals) or more (when prosodic features are occasionally signalled, although their systematic account is beyond the scope of this analysis).

instrumental in supporting or conveying speakers’ evaluation and emotions together with and beyond words?

Another relevant work for the present research is Theunissen’s (2014) analysis of visuals – slides, transparencies, power point presentations – in TED Talks vs. conference presentations. The results show that about half of the slides in the talks are hybrid in terms of semiotic types (i.e. scriptural-visual), especially covering photographs, with the functions of making scientific / specialised information more tangible (rather than proving anything), and of entertaining through humour. However, do visuals only illustrate and entertain? Or may they also have the potential to convey other attitudes and emotions affecting the audience?²

3. Data collection and methodology

The dataset collected for the research comprises fifteen talks recorded between 2012 and 2018 and delivered by native speakers of English as experts from three different domains (five talks each), i.e. the domains of Business and Economics, Law, and Technology. The corpus covers around 30,000 words over 183 minutes. The following table (Table 1) provides specific information for each talk, e.g. the knowledge domain it belongs to (first column), the title of the talk (second column), the name of and synthetic information about the speaker (third column), the month and year of recording of the talk (fourth column), its length (fifth column).

Domain	Title of Talk	Speaker	Date of recording	Length
Business and Economics	<i>Bitcoin. Sweat. Tide. Meet the future of branded currency</i>	Paul Kemp-Robertson – Co-founder of a multi-platform marketing resource	June 2013	10:48
Business and Economics	<i>The case for letting business solve social problems</i>	Michael Porter – Business strategist	June 2013	16:25
Business and Economics	<i>Why we shouldn’t trust markets with our civic life</i>	Michael Sandel – Political philosopher	June 2013	14:34
Business and Economics	<i>A provocative way to finance the fight against climate change</i>	Michael Metcalfe – Financial expert	Nov 2015	12:52
Business and Economics	<i>Why you should know how much your coworkers get paid</i>	David Burkus – Management researcher	Jan 2016	7:30
Law	<i>Chimps have feelings and thoughts. They should also have rights</i>	Steven Wise – Animal rights lawyer	March 2015	14:18
Law	<i>A prosecutor’s vision for a better justice system</i>	Adam Foss – Juvenile justice reformer	Feb 2016	15:57

² On the whole, the studies on TED here referred to as background frameworks propose partly different classifications of data from the present research, take into account partly different knowledge domains and/or different quantities of data. None of them takes into account multimodal ensembles consisting of words, gestures and visuals.

Law	<i>How I help free innocent people from prison</i>	Ronald Sullivan – Clinical professor of law	Oct 2016	11:55
Law	<i>What if we ended the injustice of bail?</i>	Robin Steinberg – public defender, activist	April 2018	14:25
Law	<i>It's time for the law to protect victims of gender violence</i>	Laura L. Dunn – Victims' rights attorney	April 2018	6:14
Technology	<i>404, the story of a page not found</i>	Renny Gleeson – Game developer, mentor for tech accelerators and startups worldwide	Feb 2012	4:01
Technology	<i>Everyday cybercrime – and what you can do about it</i>	James Lyne – Cybersecurity specialist	Feb 2013	17:23
Technology	<i>The new bionics that let us run, climb and dance</i>	Hugh Herr – Bionics designer	March 2014	18:57
Technology	<i>Tiny satellites show us the Earth as it changes in near-real-time</i>	Will Marshall – Space scientist	March 2014	8:02
Technology	<i>Technology that knows what you're feeling</i>	Poppy Crum – Neuroscientist, technologist	April 2018	12:43

Table 1
Details of dataset.

Starting from the corpus of transcripts of the talks, I first made wordlists through the Sketch Engine (<https://www.sketchengine.eu/>) to identify relevant adjectival categories, which I classified on the basis of the categorization adopted by Scotto Di Carlo (2015) (cf. Felices Lago 1997 therein). All the videos were then watched several times and multimodal ensembles involving subjective adjectives were extracted by making screenshots. These were manually analysed on different parameters: type/function of gestures (following the classification of McNeill (1992) and Kendon (2004) – as remodelled in Masi (2016) and also on the basis of Valeiras Jurado (2017)) co-occurring with relevant adjectives, and when visuals were involved too (in close-up or as background), they were analysed in terms of semiotic type and function in the context of the talk (building on Theunissen 2014). Furthermore, Lazaraton's (2004) integrated method of multimodal transcription, accounting for co-speech gestures, was expanded on to cater for the various modes under analysis. Their description was inserted next to the co-speech containing relevant adjectives, in combination with screenshots themselves. Indeed, it was this integrated methodology that enabled the identification of the functional interpretation of multimodal ensembles and their component parts.

4. Data illustration and discussion

By way of answering some of the previously raised questions, evaluation across modes emerged as follows:

- it was expressed verbally via speech and scriptural visuals;
- it was represented through metaphoric gestures on the ideational-referential level of

discourse;

- it was conveyed through pragmatic gestures emphasising importance and performing and complementing different expressive speech acts;
- it was depicted or more indirectly invoked through scriptural-visual slides, photos and videos in more or less concrete terms – either depending on inherent features or being contextually determined – thus requiring different degrees of elaboration on the part of the audience.

The following sections will provide more detailed accounts of the contribution of the different modes.

4.1. Subjective adjectives

Around 2% of words in the dataset were subjective adjectives, i.e. adjectives expressing emotional attitudes and various value-laden meanings manifesting the speaker’s subjectivity. They were found to have an even distribution across knowledge domains, viz. 33% in that of Business and Economics (from now on B&E), 36% in that of Law, 31% in that of Technology (from now on Tech). Contextual information contributed to their categorisation, following an adapted version of Felices Lago’s (1997, p. 105) functional classification scale, which subdivides axiological adjectives into ten semantic groups: aesthetics, emotion/behaviour, function/practicality/pragmatism, prominence, intellect, veracity, general qualities, vitality, ethics/religion/politics, and economy/material. Prominent categories in my data were that of aesthetics adjectives, that expressing function/practicality, and that of emotional adjectives. Table 2 summarizes the categorization with some examples of adjective types and the percentage of each category with reference to the total of subjective adjectives in the dataset.

Categories of adjectives	Examples	Percentage
Aesthetics	<i>Unique, normal, fantastic, amazing, ridiculous, spectacular, tremendous, beautiful, extraordinary, wonderful</i>	Around 26% of subjective adjectives in the dataset
Function/practicality	<i>Simple, available, effective, dynamic, accurate, comfortable, inadequate, productive, capable, inefficient</i>	17%
Emotion/behaviour	<i>Scary, serious, passionate, terrifying, boring, embarrassing, shocking, cheerful, enraged, odious</i>	13%
General qualities	<i>Good, bad, positive, nastiest, awful, evil</i>	10%
Intellect	<i>Interesting, intelligent, clever, clear, unaware</i>	10%
Prominence	<i>Fundamental, important, critical, life-altering, profound</i>	7%
Ethics/religion/politics	<i>Criminal, fair, illegal, responsible, equitable</i>	7%

Economy/material	<i>Expensive, rich, affluent, poor, economic</i>	5%
Veracity	<i>True, certain, fake, authentic, possible</i>	3%
Vitality	<i>Stronger, modest, healthy</i>	2%

Table 2
Categories of subjective adjectives in the dataset.

Both the quantitative and qualitative results are largely in line with what found by Scotto di Carlo (2015) (on the basis of a much higher number of talks and knowledge domains in her case). What is of interest in my data, however, is that 90% of subjective adjectives were found to be involved in nearly 600 multimodal ensembles comprising gestures (29%), visuals (42%) or both (29%).

4.2. Gestures

Adjective-gesture patterns comprised both metaphoric gestures (McNeill 1992) depicting entities on the ideational-referential level of discourse, and pragmatic gestures (Kendon 2004), which were the majority of clusters. They often also involved the contribution of emphatic prosody and/or significant facial expressions, and featured prominently in the domains of Law and B&E, as displayed by the pie chart below (Figure 1).

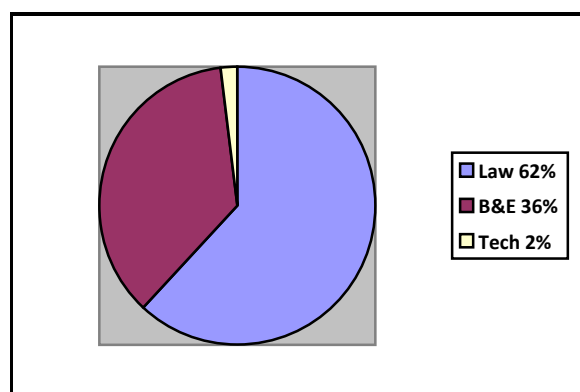


Figure 1
Adjective-gesture clusters across domains.

Let us now consider a selection of examples from the qualitative analysis. Because of space limitations, only some screenshots will be actually displayed for illustrative purposes.³

Metaphoric gestures represent abstract notions whose interpretation rests on the similarity/relatedness between the gesture configuration and the meaning of the synchronous verbal expressions. In fact, their interpretation often involves plausible inferences worked out on the basis of generalised conceptual structures dependent on our experience of the world (Cienki 2008; Masi 2016). In the following case (Table 3), for

³ Using TED screenshots for research is permitted by CC BY – NC – ND 4.0 International. I would like to thank the TED Media Requests Team for their support.

instance, a configuration of the hands in the shape of a container that is being slightly shaken at front, and with some tension involved, was interpreted, in context, as the action of holding something precious, exceptional, i.e. unique. In the table below (and subsequent ones), the description of the gesture is given in parentheses and in italics, and follows the verbal text where verbal co-gesture items have been underlined, with the evaluative adjective in bold type. After the gesture description, other details are provided, namely the name of the speaker, the exact time in the talk where the segment occurs, the knowledge domain and the interpretation of the type and function of the gesture.

Verbal text and gesture description-interpretation
Indeed, the kind of <u>unique organizational entity of this age</u> (<i>both hands close and high at front, container-shaped, slightly shaking, tension involved</i>) (Porter, 02:35, B&E)
Interpretation: metaphoric-referential gesture for ‘unique’

Table 3

Transcription of adjective-gesture cluster featuring a metaphoric-referential gesture representing ‘unique’.

Other more complex examples, for which screenshots have been included, are the next contiguous cases (see Table 4), in which both the representations of ‘broad’ and ‘useless’ exploit the dimension of quantity of space, and the interpretation of the second one, in particular, hinges upon a contrast with the first: arms stretched wide apart at front represent ‘broad’, while reduced space between hands stands for ‘useless’.



Screenshots	Verbal text and gesture description-interpretation
	Despite our broad <u>discretion</u> , we learn to avoid risk at all cost (<i>both arms stretched apart, open hands, palms facing audience</i>) (Foss, 07:06, LAW) Interpretation: metaphoric-referential gesture for ‘broad’
	rendering our discretion basically useless (<i>open hands move towards one another at front, palms facing each other</i>) (Foss, 07:11, LAW) Interpretation: metaphoric-referential gesture for ‘useless’

Table 4

Transcription of adjective-gesture clusters featuring metaphoric-referential gestures representing ‘broad’ vs. ‘useless’.

Gesture configurations may have a looser link with what is being talked about on the ideational-referential level. In the next example (Table 5), another metaphoric-referential gesture represents the quality of being ‘secret’ via open hands prone at front, with hand palms facing down as if covering or hindering access to the perception of something undisclosed. Although the case in Table 6, further down, shows the same configuration, this time it could be interpreted either as a more abstract metaphoric-referential gesture (i.e. involving a higher degree of inferencing leading from the idea of something ‘undisclosed’ to something ‘scary’), or, following Kendon’s (2004) classification of families of gestures, as having a pragmatic function conveying the speech act of wishing to stop a negative situation (in connection with the negatively-oriented evaluative item ‘scary’).⁴

Verbal text and gesture description-interpretation
<u>But keeping salaries secret</u> (<i>open hands prone at front</i>) (Burkus, 01:59, B&E)
Interpretation: metaphoric-referential gesture for ‘secret’

Table 5

Transcription of adjective-gesture cluster featuring metaphoric-referential gesture representing ‘secret’.

Verbal text and gesture description-interpretation
<u>Which is kind of scary</u> (<i>open hands prone at front</i>) (Lyne, 09:52, TECH)
Interpretation: pragmatic gesture (wishing to stop) complementing ‘scary’

Table 6

Transcription of adjective-gesture cluster featuring pragmatic gesture complementing ‘scary’.

Below (Table 7) is a different example of pragmatic gesture (for which a screenshot is also provided) with the opposite configuration, i.e. open hand supine. Still following Kendon (2004), members of this gesture family can be regarded as an offer of information, in this case setting the scene for the presentation of the speaker’s view.⁵

⁴ I occasionally came across this gesture configuration associated with negatively-oriented adjectives (yet, counterexamples were also found).

⁵ Several cases of open hand supine configurations co-occurring with positively-oriented adjectives were present in the data (yet again with counterexamples).


Screenshot	Verbal text and gesture description-interpretation
	<p>I am here to say something simple (<i>left open hand supine</i>) (Steinberg, 06:57, LAW)</p> <p>Interpretation: pragmatic gesture (offer of information) complementing ‘simple’</p>

Table 7
 Transcription of adjective-gesture cluster featuring pragmatic gesture complementing ‘simple’.

Further types of pragmatic gestures complying with Kendon’s (2004) classification are given below. Table 8 involves bunch-shaped hands repeatedly moving up and down which co-occur with ‘fleeting’ and are marked by prosodic emphasis. They are compatible with the function of emphasising the importance of the ‘moment of understanding’ experienced by the speaker.

Verbal text and gesture description-interpretation
<p><u>Just for a fleeting moment</u> (<i>bunch-shaped hands repeatedly moving vertically</i>) (Steinberg, 00:49, LAW)</p>
<p>Interpretation: pragmatic gesture (stressing importance) complementing ‘fleeting’</p>

Table 8
 Transcription of adjective-gesture cluster featuring pragmatic gesture complementing ‘fleeting’.

The case in Table 9 refers to ring-shaped hands repeatedly moving up and down, co-occurring with ‘extraordinary’ and prosodic emphasis, evidently expressing insistence. In Kendon’s (2004) classification, this configuration is frequently used when the speaker wants to make clear an opinion that explicitly contradicts an opposite view, which is a compatible interpretation with the context of the example.

Verbal text and gesture description-interpretation
<u>We know the extraordinary cognitive capabilities that they have (ring-shaped hands repeatedly moving up and down)</u> (Wise, 10:14, LAW)
Interpretation: pragmatic gesture (insistence) complementing ‘extraordinary’

Table 9

Transcription of adjective-gesture cluster featuring pragmatic gesture complementing ‘extraordinary’.

4.3. Visuals

My dataset contained 179 visuals, with the periodicity of 1 every 61 seconds. In line with Theunissen (2014), I identified a high number of hybrid types from a semiotic point of view, which appeared to have a varied distribution across domains. In this case, it was the domain of Tech that featured the highest number and variety of types (see Figure 2).

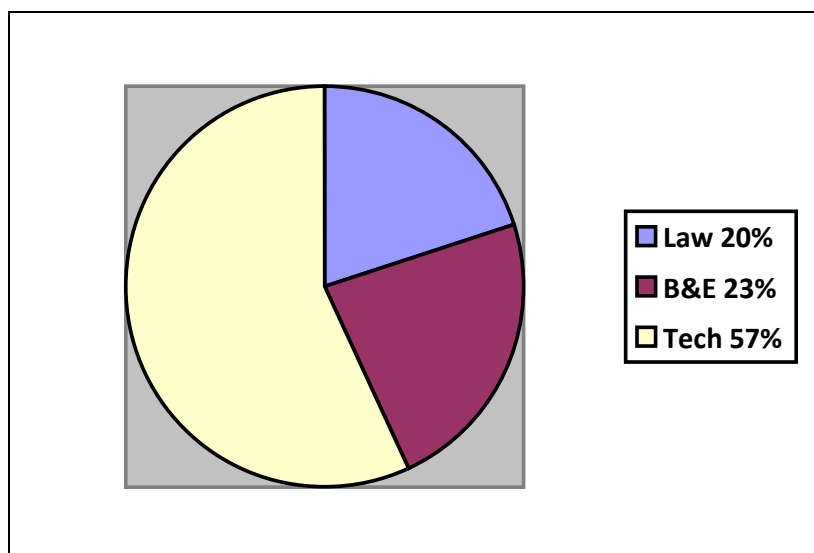


Figure 2

Adjective-visual clusters across domains.

For the classification of the semiotic type each visual belonged to, I referred to the adapted typology by Rowley-Jolivet (2002) and Lemke (1998) as used by Theunissen (2014). The most frequent types in my data were the scriptural-visual one (slides containing images and verbal code), only visual (including photos and videos), followed by only scriptural slides and a less represented type called ‘other’ (covering few scriptural-graphical and numerical visuals, exclusively with graphs and numbers, respectively). See Figure 3 below for a more specific account of percentages.

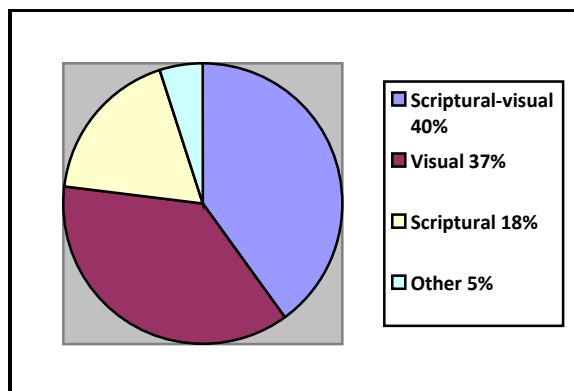


Figure 3
Semiotic types of visuals in the dataset.

As for the function of visuals, I considered a basic distinction between cases similar to the ones Theunissen regarded as ‘making information more tangible’, which I conceived of as having an ‘illustrative’ function – indeed the majority of cases in my data – and a category I added from scratch, namely that of ‘restating’ (in written words or pictorial means) what said in speech (see Figure 4 below).

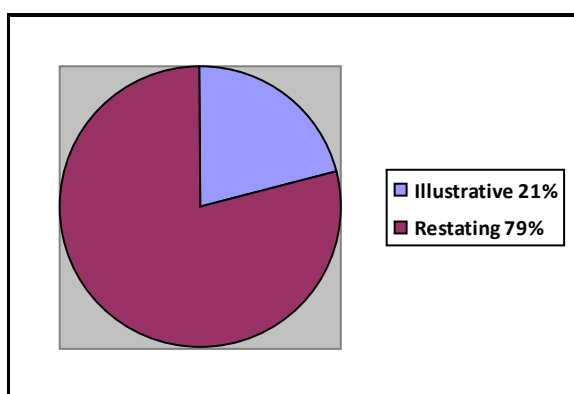


Figure 4
Functions of visuals in the dataset.

I also took into account Theunissen’s category of ‘entertainment/humour’, poorly represented in my data, and included another called ‘evaluative/emotional’, representing 22% of all visuals. Both of them were conceived of as superimposing on the first two functional categories mentioned above. The evaluative/emotional function, in particular, was attributed on the basis of the presence of evaluative and/or emotionally charged lexis, or a pictorial representation of feelings/emotions. In some cases, the function was found to be contextually determined, e.g. through a contrast with a former visual. In the following example (Table 10) a scriptural-visual slide illustrates ‘cuteness’ through the photo of a dog that is intended to inspire a feeling of affection.


Screenshot	Verbal text and visual description-interpretation
Please plug in my USB key... 	You could try looking really cute . <u>Awww</u> (Lyne, 04:30, TECH) Interpretation: scriptural-visual (full-screen display); function: illustrative-evaluative/emotional

Table 10
Transcription of adjective-visual ensemble featuring scriptural-visual slide.

4.4. Examples of more complex ensembles

Besides adjective-gesture and adjective-visual patterns, more complex ensembles consisting of adjective-gesture-visual were identified too (either concomitant or closely contiguous), especially in the domain of B&E (see Figure 5).

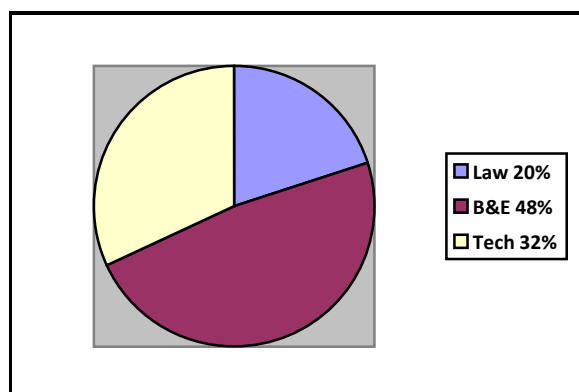


Figure 5
Adjective-gesture-visual clusters across domains.

Tables 11 and 12, further down, provide the transcription of some selected examples of this type of ensembles (capital letters in the examples account for prosodic stress). In table 11, a pragmatic gesture emphasises the importance of the evaluation expressed in speech ('free'), and soon after, a slide restating the same view becomes visible in the background (relevant screenshots have been included).



Screenshots	Verbal text, gesture and visual description-interpretation
	<p><u>FREE</u>dom makes all the difference, and <u>FREE</u>dom <u>SHOULD BE FREE</u> (<i>right bunch repeatedly moving up and down</i>) (Steinberg, 7:03, LAW)</p> <p>Gesture interpretation: pragmatic (stressing importance), complementing ‘free’</p>
	<p>(Steinberg, 7:07, LAW)</p> <p>Visual interpretation: scriptural slide (background display); function: restating-evaluative</p>

Table 11

Transcription of adjective-gesture-visual ensemble featuring pragmatic gesture and scriptural slide.

Table 12 covers some segments taken from a short talk on 404 pages, which first aims at depicting the experience of hitting a 404 in negative terms by means of highly multimodal strategies,⁶ then it suggests looking at it differently, by turning 404 pages into creative opportunities to promote one’s business. In the segments below, the experience of hitting a 404 is verbally described as annoying, a description that is reinforced through extra-prosodic emphasis and a gesture configuration which could be regarded as representing the quality of being annoying (or annoyed) as a kind of heavy burden supported by hands with palms up that move first up, then down. Soon after, the same experience is depicted through a verbal metaphor, in terms of a ‘broken relationship’, and a pictorial metaphor, as a scriptural-visual slide (in the background) includes the image of a broken robot.

⁶ The multimodal representation comes to a climax with an audiovisual simile, i.e. a video featuring a bike accident stands for the experience of hitting a 404 page.

Verbal text, gesture and visual description-interpretation
Remember for yourself, it's ANNOYING when you hit this thing (<i>both open hands, palms up, move up and down</i>) (Gleeson, 00:47, TECH)
Gesture interpretation: Metaphoric-referential gesture for 'annoying'
<u>Because it's a feeling of a broken relationship</u> (Gleeson, 00:52, TECH)
Visual interpretation: Scriptural-visual (background display), function: illustrative- emotional (contextually determined – metaphorically depicting a feeling through the image of a broken robot)

Table 12

Transcription of adjective-gesture-visual ensemble featuring metaphoric gesture and scriptural-visual slide.

4.5. Further stages of the research

Within a multimodal perspective, all modes are equally important in communication, while my study so far has evidently been biased towards the verbal code. In fact, further stages in the research are underway to overcome this and other shortcomings. A preliminary scrutiny of the entire talks of the dataset focused on pragmatic gestures (cf. Kendon's (2004) gesture families) as a starting point and highlighted some trends worth noticing: for example, they tended to occur at revealing or turning points, or in the closing sections of the talks, and often co-occurred with first person pronouns and modal verbs. Table 13 captures a turning point in the talk in which the speaker is about to express her opinion. Her palms facing the audience and moving horizontally seem to convey a wish to stop a negative situation.

Verbal text and gesture description-interpretation
<u>CALLing into QUEStion the leGItimacy of the enTIre AMERican LEgal system</u> (<i>Right hand repeatedly moving from left to right, palm facing the audience</i>) (Steinberg, 06:50, LAW)
Interpretation: pragmatic gesture (wishing to stop)

Table 13

Transcription of co-speech gesture with pragmatic function (wishing to stop).

The next two cases (Table 14 and 15), instead, occur in the closing sections of the talks and the gestures included there appear to express personal involvement and benevolence.

Verbal text and gesture description-interpretation
<u>the way we view our cases</u> (<i>both hands open, palms towards speaker, close to chest</i>) (Wise, 14:00, LAW)
Interpretation: pragmatic gesture (expression of personal involvement and benevolence)

Table 14

Transcription of co-speech gesture with pragmatic function (expression of personal involvement and benevolence).

Verbal text and gesture description-interpretation
<u>We MUST, MUST, MUST do “whatever it takes”</u> (<i>interlaced hands repeatedly move down at front</i>) (Metcalf, 12:30, B&E)
Interpretation: pragmatic gesture (expression of personal involvement and benevolence)

Table 15

Transcription of co-speech gesture with pragmatic function (expression of personal involvement and benevolence).

5. Concluding remarks

Overall, far from being complete and despite its rather complex quality, the multimodal account proposed in this study has provided some findings that appear to be compatible with the hypothesis I stated at the beginning, i.e. that important threads of meaning in the genre largely rest on the cumulative effect of multimodal resources at work in the talks. The research results thus far have indeed highlighted that gestures and visuals are significantly co-deployed with some subjective adjectives to represent evaluation and emotions in the dataset taken into consideration. Different types of gestures (metaphoric-referential and pragmatic ones) were identified, and in some cases, different types of visuals, too, contributed to multimodal ensembles with a varied distribution across the knowledge domains under analysis. While visuals were especially involved in the domain of Tech (in adj-visual patterns) and in that of B&E (in more complex adj-gesture-visual clusters), the domain of Law displayed a higher frequency of adj-gesture patterns. In fact, such trends (to be confirmed through further exploration) seem to point to domain variation as a possible constraining factor responsible for the diversification of the multimodal rhetoric associated with the genre.

One of the major limitations of the present account is undoubtedly the strong bias towards the verbal code. Yet, further stages in the research may lead to more balanced insights and a more comprehensive picture, along the lines already adopted in a preliminary investigation of data starting from gestures. What is also needed is a more fine-grained analysis of visuals, considering, for instance, their details and connotations (Ledin, Machin 2018), their distribution within the talks and their rhetorical functions (Tseronis, Forceville 2017), with possible experimentation on their actual reception on the part of viewers.

Bionote: Silvia Masi is Associate Professor of English Language and Linguistics at the University of Pisa, Department of Philology, Literature and Linguistics. She holds a PhD in Linguistics of Modern Languages (English) from the same University, where she teaches undergraduate and postgraduate courses. Her research focuses on lexical semantics (in a contrastive perspective with Italian), translation, text linguistics and discourse analysis. She has published in national and international journals and collective research volumes and is the author of a monograph on the polysemy of English spatial particles in a contrastive perspective with Italian. Other publications focus on formulaic language in film dubbing, culture-bound items such as food in dubbing and in the translation of children’s literature, and metadiscourse in scientific popularisation. More recent research interests include translation strategies in informational books for children and the multimodal discourse analysis of TED talks.

Author’s address: silvia.masi@unipi.it

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