

Multimodality in EMI educational materials: The use of semiotic modes in a business administration course

La multimodalidad de los materiales educativos usados en contextos EMI: el uso de recursos semióticos en un curso de administración de empresas.

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Abstract

This study approaches English-medium higher education in its multimodal complexity. As pointed out by Lin (2019), in educational contexts language is necessarily entangled with other semiotic modes. In addition, the range of semiotic modes is multiplied by the increasing use of online-based educational materials, since new modes become available in digital settings (e.g. animations, visual and sound effects, hyperlinks, etc.). Novel combinations of these semiotic resources give rise to emerging cybergenres with interesting pedagogical applications. This widening of the semiotic repertoire opens new possibilities in higher education settings. It

enables teachers to make classes more engaging and varied. However, in order to fully exploit the pedagogical potential of online-based educational materials, it is of crucial importance to be aware of the complex interplay of semiotic modes in cybergenres. Likewise, it is necessary to reflect on what turns them into useful tools to facilitate communication and learning. In this study, we carry out a multimodal discourse analysis of the cybergenres used in an EMI Business Administration course, which include, among others, google tools, videos and websites. Our objectives are: 1) to scrutinize their multimodal nature; 2) to identify patterns of modal configurations; 3) to reflect on their affordances and meaning-making potential. Our findings suggest that these materials show a complex interplay of modes, with recurring modal configurations. We believe the results of this study can lead to a more conscious and effective pedagogical application of these genres.

Keywords: Multimodality, cybergenres, EMI, modal configuration, affordance

Resumen

Este estudio se centra en la educación superior mediada a través del inglés y en la complejidad de su naturaleza multimodal. Como indica Lin (2019), en contextos educativos, el lenguaje está necesariamente entrelazado con otros recursos semióticos (o modos). Además, el creciente uso de materiales educativos en entornos digitales multiplica la gama de recursos semióticos disponibles (animaciones, efectos visuales y sonoros, hipervínculos, etc.). La combinación de estos recursos semióticos da lugar a cibergéneros con interesantes aplicaciones pedagógicas. Esta ampliación del repertorio semiótico abre nuevas posibilidades en entornos de educación superior, permitiendo a los docentes hacer sus clases más variadas y atrayentes. Sin embargo, para aprovechar plenamente el potencial pedagógico de los materiales educativos en línea, es de crucial importancia ser conscientes de la compleja interacción de los

recursos semióticos que los componen. Asimismo, es necesario reflexionar sobre qué los convierte en herramientas útiles para facilitar la comunicación y el aprendizaje. En este estudio, llevamos a cabo un análisis del discurso multimodal de los cibergéneros utilizados en un curso de Administración de Empresas impartido en inglés (EMI). Estos materiales incluyen, entre otros, herramientas de Google, videos y sitios web. Nuestros objetivos son: 1) examinar su naturaleza multimodal; 2) identificar patrones de configuraciones modales; 3) reflexionar sobre sus potencialidades y capacidad de construcción de significado. Nuestros hallazgos sugieren que estos materiales muestran una compleja interacción de modos, con configuraciones modales recurrentes. Creemos que los resultados de este estudio pueden conducir a una aplicación pedagógica más consciente y efectiva de estos géneros.

Palabras clave: Multimodalidad, cibergéneros, EMI, configuración modal, potencial comunicativo

1. INTRODUCTION

This research delves into the intricate landscape of English-medium higher education, considering its multimodal nature. Lin (2019) highlights how language in educational settings is intertwined with various forms of communication beyond just words. The advent of online educational resources further amplifies this complexity, introducing a plethora of new semiotic modes such as animations, visual effects, and hyperlinks. These combinations give rise to innovative cybergenres with promising educational applications, like science dissemination and instructional videos (Valeiras-Jurado et al, 2022; Ruiz-Garrido-Fortanet-Gómez, 2022; Girón-García & Fortanet-Gómez, 2023;). However, to fully leverage the educational potential of online materials, it is crucial to understand the intricate interplay of semiotic modes within cybergenres and how they construct meaning. Moreover, it is essential to consider how these tools can be

effectively used to facilitate communication and learning. In this study, we conduct a multimodal discourse analysis of cybergenres used in an EMI Business Administration course, including various online tools, videos, and websites. With this analysis we intend to answer the following research questions

- What are the multimodal characteristics of these genres?
- Do they show recurring patterns of modal configurations?
- What affordances and potential for meaning making are facilitated by the modal configurations identified?

1.1 The rise of cybergenres: multimodality and digital literacy

The concept of genre is constantly evolving (Maingueneau, 2010). The emergence of the Internet and new digital platforms has given rise to new types of genres. This study is especially concerned with cybergenres, that is, web-mediated genres that use the Internet as a medium. According to Shepherd and Watters (1998), three types of cybergenres can be distinguished:

- Replicated genres, which originate from a traditional genre and stay unchanged as they move to the online realm.
- Variant genres that evolve and acquire new traits using the affordances of their new medium (e.g., online newspapers).
- Novel genres, which are created directly in the digital medium and are substantially different from existing ones (e.g., YouTube videos)

Classic Discourse Analysis cannot always account for the new traits, new features, and new ways of conveying meaning that variant and novel genres incorporate. Multimodality can bridge this gap, providing a more comprehensive view of meaning-making.

Multimodality is based on the premise that meaning is made through a wide array of semiotic modes beyond written and spoken language. Some examples of semiotic modes are gestures, images, visual effects, music, etc. From a multimodal approach, meaning is assumed to be the result of a seamless combination of modes into well-orchestrated multimodal ensembles (Kress, 2010). It follows from this that, to make full sense of cybergenres, new types of literacies are required that take these modes and the digital media into account: multimodal and digital literacy (Jewitt, 2008; Cope & Kalantzis, 2009; Valeiras-Jurado et al., 2019).

Therefore, a multimodal approach to cybergenres is based on the premise that different modes interact to express meaning in the genre-creation process (Kress, 2003; Kress & van Leeuwen, 2006). Several key concepts can help analyze this meaning-making process. One of them is the media. If modes enable the representation of meaning, media allow for the dissemination of this meaning (Jewitt, 2004). In the case of the cybergenres that concern this study, the media is always digital. Another crucial concept is modal density (Norris, 2004) which refers to the number of modes, their intensity (i.e., how much they are used), and the complexity of the interrelationships among them. By exploring these interrelationships, we can elucidate if these modes are used consistently and do not contradict each other. We refer to this as modal coherence (Valeiras-Jurado, 2019). Finally, the distinction posed by Valeiras-Jurado et al. (2022) between embodied and filmic modes is of particular relevance to the present study. The former are orchestrated by speakers and are performed with the body. This is the case of paralanguage, gestures, head movements, posture, etc. The latter are added during an editing or postproduction process, so they can be considered more specific for videos and digital media. Some examples are visual and sound effects, cuts, camera shots, etc.

Jones and Hafner (2021) pose that the digital media in which cybergenres are hosted endow them with specific capabilities or affordances and determine the actions that can be performed with these genres. For example, the audience (i.e., readers/ viewers/ listeners of online genres) can choose their own reading path by clicking on hyperlinks, playing videos, downloading pictures or other documents, or posting comments to interact with the author and other members of the audience. This possibility of interaction makes these genres an invaluable tool to engage their audience, and, as we will argue later, an effective pedagogical tool in educational settings.

A specific feature of cybergenres that is of particular relevance to the present study is their ability to facilitate *genre embedding*, or the incorporation of a text that is in itself a genre within another genre (Kwasnik & Crowston, 2005). Examples of genre embedding are videos inserted within websites. According to Luzón and Pérez-Llantada (2022: 23) "the linking and composing affordances of digital genres shape them as open, fluid and hybrid, and facilitate the creation of relations between genres not existing in other media". As we will discuss in the Results section, this is a very salient characteristic of the dataset used for the present study.

1.2 The use of cybergenres in academic settings: recontextualization of science

As Scotto di Carlo (2014) claims, cultural organizations no longer hold a monopoly over knowledge dissemination, as the tendency is to bring science closer to the public without the need for an academic institution as an intermediary. Luzón and Pérez-Llantada (2022: 1) point out, "researchers are now encouraged to establish dialogue with the general public, engage citizens in research processes and disseminate knowledge to non-specialist readerships".

The Internet has played a crucial role in this process, multiplying the possibilities for scientists to present their work to the general public (Rowley-Jolivet & Carter-Thomas, 2019). Cybergenres

for knowledge communication have proliferated and evolved as scientists increasingly use them to adapt to this new academic scenario (Luzón & Pérez-Llantada, 2022). Cybergenres are, therefore, one of the preferred options for disseminating science and the natural means for open science communication, since they afford transparency, accessibility, sharedness, and collaboratively developed knowledge, (Erviti & Stengler, 2016; Kousha et al., 2012; León & Bourk, 2018; Vicente-Saéz & Martínez-Fuentes, 2018). Within cybergenres, videos are a privileged format of science dissemination. Pasquali (2007) points out how scientists have actually used moving images to record and describe their work as soon as technology allowed it. Since then, scientific journals have embraced the use of videos as supplementary material to convey information more efficiently. Some examples can be found in the Journal of Visual Experiments (JoVE), which publishes experiments in video format, allowing for a considerably higher level of detail in the methodology description and enabling higher replicability, as well as more accessibility for the general public because they can convey concepts and processes that would be difficult to explain using written language. Authors such as Luzón (2019), Hafner (2018) or León and Bourk (2018) also suggest that online videos, in particular, have become an invaluable tool for communicating with peers, to provide detailed accounts of methods, to promote researchers' work and to engage the general public. This engagement potential is due to the ability of videos to transmit emotions that resonate with a wide audience.

However, bridging the gap between science and the general public entails the challenge of adapting to an audience that does not share the same academic background. A situation of knowledge asymmetry is produced that needs to be remediated. This adaptation has been referred to in previous literature as recontextualization. Recontextualization means moving scientific content from academia and its associated genres to a different context in which new genres and new multimodal ensembles, i.e., combinations of semiotic modes, become available.

The recontextualization processes by which scientific content is adapted to a nonspecialized audience have raised scholarly interest. In the last decade, researchers have explored new ways of communicating science through genres such as TED talks (Scotto di Carlo, 2014, 2015; Xia & Hafner, 2021), research groups online science videos (Luzón, 2019), Three Minute Thesis presentations (Carter-Thomas & Rowley-Jolivet, 2020; Zou & Hyland, 2021), research pitches (Ruiz-Madrid, 2021) or online science dissemination videos (Valeiras-Jurado & Bernad-Mechó, 2022; Bernad-Mechó & Valeiras-Jurado, 2023; Ruiz-Madrid & Valeiras-Jurado, 2023; Valeiras-Jurado & Ruiz-Madrid, 2023).

Luzón (2019), for example, identifies recontextualization strategies in online science videos produced by research groups. According to their function, she groups recontextualization strategies into strategies to build credibility; strategies to build persuasive arguments; strategies to tailor information to the assumed knowledge of the audience; and strategies to engage the audience. She points out how these strategies orchestrate speech, gestures and images in multimodal ensembles.

Concerning one of the most popular science dissemination genres, TED Talks, Xia and Hafner (2021) offer a multimodal analysis of the engagement strategies frequently found in these talks. Their analysis reveals that engagement of online viewers tends to require a combination of multiple semiotic resources, including, among others, visual aids, camera shot, and gaze. Valeiras-Jurado et al. (2022) further explore the complexity of multimodal ensembles in online TEDx talks and compare them to PBS online science videos. The comparative analysis highlights the crucial role of filmic modes that are added to the ensemble during montage. It also shows the importance of keeping modal coherence and making all modes contribute towards a clear communicative aim. In Bernad-Mechó and Valeiras-Jurado (2023), further differences across both genres are brought to the fore in what concerns their use of engagement. Mainly, these refer to different targets for gaze (i.e., camera for PBS

video vs. audience or stage for TEDx); a more extensive use of filmic modes in PBS, more extensive use of dialogic involvement in TEDx, and more extensive use of attention getting in PBS. These differences can be accounted for by two crucial aspects: the presence of a physical audience and the importance attached to montage and editing, which determines the extent and mastery to which filmic modes are used.

With a focus on online science dissemination videos, Ruiz-Madrid and Valeiras-Jurado (2023) provide a comprehensive analysis of the modes employed in these videos and the way they are used to recontextualize scientific content. They find that embodied modes (i.e., gestures, facial expression, head movements, etc.) can prompt a specific response from the audience, or provide emphasis. Even modes that are not so evident as meaning-making resources play a crucial role in recontextualizing scientific content. For example, physical artifacts can provide visual representations that facilitate understanding of difficult concepts. Likewise, clothing can signal affiliation to a research institution or broadcasting channel. They conclude that recontextualisation strategies, although rooted in linguistic tradition, are realized multimodally.

In Valeiras-Jurado and Ruiz-Madrid (2023), the authors delve into potential disciplinary differences. Their analysis reveals both similarities and differences regarding the recontextualization strategies used in videos from different disciplines, and also in the multimodal ensembles that realize these strategies. The findings suggest that while most similarities are triggered by the online medium, the differences can be mainly attributed to the target audience, and only to a lesser extent to the scientific discipline.

Although all these cybergenres show different ways of accommodating and engaging their audiences, what they have in common is that they belong to a model of science popularization that brings scientists into direct contact with the general public, without the need for an intermediary such as a journalist (Xia &

Hafner, 2021). This direct accessibility of science also brings new opportunities in educational settings, as science dissemination cybergenres are freely available and can be turned into useful pedagogical tools.

1.3 The use of cybergenres in educational settings: multimodal genre pedagogies

As Ruiz-Madrid and Valeiras-Jurado (2020) claim, ESP and EMI teachers are expected to help students develop the multimodal communicative competence required to become competent professionals in their respective areas. A multimodal genre pedagogy that unveils the multimodal characteristics of professional and academic genres is a tool that can help in this task. In addition, this approach can be particularly suitable for a pedagogical application of the cybergenres that concern this study, given their inherent multimodal nature and modal density (Bateman, 2008, 2014; Herring, 2013, 2019).

The use of cybergenres in educational contexts is not a new phenomenon. Both Kay (2012) and Giannakos (2013) report a significant increase in the use of videos in the classroom, facilitated by the adoption of high-speed internet connections and the appearance of platforms such as YouTube. Given the increasing popularity of videos and other cybergenres in educational settings, a closer look at how teachers and students can construe meaning out of them is required, which calls for a multimodal approach to these genres. Furthermore, as Chun (2012) concludes, if students do not develop "deeper understandings of how discourses are constructed and disseminated through a variety of modes, many of these students might fail to take adequate control of them" (p. 166).

Girón-García & Fortanet-Gómez (2023) point out that cybergenres, and especially online videos, can bring academic

language, that is complicated to understand, closer to the general audience through a series of recontextualization strategies that facilitate the understanding of specialized language. Recontextualization is present in almost any educational setting, and the fact that these cybergenres implement strategies to bring content closer to their audiences enhances their pedagogical potential. For this reason, online videos can be particularly useful as pedagogical materials and be part of a multimodal genre pedagogy, along with other cybergenres such as websites, blogs, or podcasts.

Regarding the objectives with which these materials are used in class, Wijnker et al. (2019) find that teachers use them to engage students, activate their prior knowledge on the topic, and present examples. Furthermore, Zarzycki (2021), following Alhamami (2013), classifies the criteria that can be used to assess YouTube videos as learning tools as follows:

- 1. Technical characteristics: sound and image quality, length;
- 2. Attractiveness: the video must be entertaining (e.g., accompanied by background music, subtitles, and pictures);
- 3. Clarity: the speaker's body language, speed of voice, use of colors, etc. should facilitate understanding;
- 4. Reactions: how many people liked and disliked the video;
- Content: good structure, avoid commercial ads or culturally sensitive material.

Girón-García & Fortanet-Gómez (2023) further claim that the use of videos in ESP classes as a pedagogical resource becomes particularly relevant as a result of their modal density. As they show, the presence of embodied modes and filmic modes helps to increase the motivation and engagement of 'digital natives' (Prensky, 2001; 2017). This way, scientific and academic content is more accessible to 21st Century learners, who demand a recontextualization of the

information through digital media and filmic modes (Girón-García & Fortanet-Gómez, 2023). As a consequence, more attention should be paid to the multimodal nature of YouTube and other platform videos, as well as other cybergenres, to fully exploit their meaning-making potential and their capacity to improve multimodal literacy.

With that premise in mind, in this study, we focus our attention on the multimodal nature of cybergenres used in an EMI Business Administration course, in order to discover their multimodal characteristics, unveil recurring patterns of modal configurations, and explore their affordances and potential for meaning making.

2. METHODOLOGY

2.1. Dataset

In this study, we carry out a multimodal discourse analysis (MDA) of the cybergenres used in an EMI Business Administration course. To this aim, we examined its online learning platform (Virtual Classroom or VC), based on the open-source learning management system Moodle. In particular, we were interested in the materials linked to this VC through the Moodle resource called *URL*: a link to an external website which is made available for the users of the VC. We consider this different from hyperlinks, which are also links to other websites, but they are embedded in text, and in fact they are often only recognizable by a change in font type or colour. The VC of this course was structured in 10 sections or blocks. The first section offered general information about the course, and the following sections corresponded to the 9 content units.

Before selecting a cybergenre for our analysis, we quantified and classified the Moodle URLs used in the VC. Table 1 shows the distribution of URLs throughout the course and their type.

Table 1. Moodle URL classification

UNIT	GOOGLE TOOLS	WEBSITES	VIDEOS	TOTAL URLs
General	3	0	0	3
1	3	4	1	8
2	3	2	4	9
3	1	2	0	3
4	2	3	2	7
5	2	2	5	9
6	1	0	0	1
7	5	3	0	
8	0	0	7	
9	0	1	3	
Total	20	17	22	

Mainly, we find three types of URLs in this VC, each one using a different cybergenre: Google tools (e.g., Google Forms), videos, and websites. A closer look at the structure of each unit in the course shows that the core content is always provided in a PDF slide show included in the VC through the Moodle resource called *file* (therefore not a type of URL). This PDF file is added to the VC as a reference document for the students, since the teacher uses the slide show in PPT format. The cybergenres included as URLs revolve around the content in this file. However, these cybergenres are used for different purposes, as was informed by the teacher. While slide shows help the teacher introduce the topic, Google Forms are used as a facilitating tool to ease communication with students who frequently provide answers to exercises through G-Forms. Videos and websites, on the other hand, are used to provide extra information (e.g., to go deeper into a specific aspect) or as input for some practical exercise.

From the nine units available, we selected Unit 4 - Strategic Management, a unit that uses the figure of Lady Gaga as an example of a successful business model in the music industry. There were two

reasons for this selection. First, it contained examples of the three cybergenres mentioned. Secondly, it also offered a wider variety in the use of websites, including a blog, which was not present in the rest of the units. We used modal density as a criterion to select samples of cybergenres in this unit to analyze multimodally. Following this criterion, we discarded Google Forms and slide shows because their use of semiotic modes was significantly more limited. Three websites (two online newspapers and one blog) and two videos were selected for multimodal analysis.

Specifically, the three websites were two online articles from the newspapers *Wall Street Journal* and *Business Insider*, and an entry from the online blog *Brand-as-Business Bites* by Denise Lee Yohn, a professional business consultant. The three of them discuss Lady Gaga's business success. In addition, two videos are used in the materials that comprise this unit. The first one is a whiteboard animated video called *What is strategy?* It is available on YouTube and was produced in 2015 by the BYU Marriott School of Business. The second is a video-recorded interview with Lady Gaga by the journalist Lee Hawkins (for the *Wall Street Journal*). More details to further contextualize this dataset are provided in the Results and Discussion section.

2.2 Semiotic modes included in the MDA

The scope of our MDA was inspired by previous research dealing with multimodal analysis of cybergenres (Valeiras-Jurado & Bernad-Mechó, 2022; Girón-García & Fortanet-Gómez, 2023; Valeiras-Jurado & Ruiz-Madrid, 2023). The selection of modes followed a corpusdriven approach.

In the case of websites, the semiotic modes scrutinized were:

 the written text, including typography (bold, italics, different font or size, capitalization)

- static image, including facial expressions and gaze, as well as the vectors of the image and the horizontal and vertical angle, following Kress & van Leeuwen (2006)
- moving image (appearing in videos that are embedded in the websites and become accessible as the visitor of the web clicks on a play control or on a hyperlink)
- sound (voice and music that appear in embedded videos and podcasts)

In the case of videos, we observed:

- embodied modes, that are performed with the body: spoken words, paralanguage (intonation, speed, tone of voice, pitch), facial expression, posture, and gestures
- disembodied modes, that are external to the body (dress code, decoration)
- filmic modes, that are added to the videos during an editing phase (written text in the form of subtitles or pop-ups, visual effects, sound effects, music).

3. RESULTS AND DISCUSSION

The MDA identified the semiotic modes employed, the layout and reading path in the case of websites, and the way all these elements interact. In this section, we will present the results of the MDA of each cybergenre.

3.1 The websites

We will first focus on the websites in chronological order (from the oldest to the most recent). After the analysis of each genre, we will

consider similarities and differences across them in order to identify patterns in the use of semiotic resources. Finally, we will also reflect on the possibilities that these combinations of modes, or multimodal ensembles, can afford in terms of meaning-making.

The first website in our dataset is an article from the online newspaper *Wall Street Journal*, published on 29 January 2010. It is entitled *The Lessons of Lady Gaga*. The article discusses the astonishing success of this artist and presents her as a business model to follow.

The website makes use of the following modes:

- written text, including different typography (e.g., title and subtitles are in bold, some hyperlinks appear in capital letters, the name of the author also has a different font)
- static image: a picture of the artist singing in a concert
- moving image and sound in an embedded video: the website has an embedded video of a news program featuring the author of the article as a guest (see bottom of Figure 1).

Considering the layout of the online article, the content is organized in three columns (see Figure 1), the one in the middle being the most prominent. This central column offers the main text, which is divided into subsections (each one corresponding to a lesson to be learned from Lady Gaga). The column on the left contains links to social media, and the column on the right has advertisements and links to other news published in the newspaper.

The reading path of this article is mainly top-down, but due to the hyperlinks interspersed it is not necessarily linear. The text in the central column is interrupted on four occasions: one with a link to vote in the Grammy Awards, a second one with a link to a blog post about the artist, a third one with a link to the news video, and a final one with an interactive infographic representing the state of the music industry. All of them are in some way related to the content of

Figure 1. Schematic representation of the online article "The Lessons of Lady Gaga"

F	Fitle: The lessons of Lady Gaga	
Social networks		Ads Videos of other pieces of news
	Main text	
	Video of TV news	

the main text (e.g., in 2010 Lady Gaga presented the Grammy Awards ceremony, so the event is related to the content of the article).

Focusing now on the static image on this website, its prominent role and salience are noticeable. Its large size and top position on the page contribute to this. It is a narrative image with a vector toward an unknown point (Kress & van Leeuwen, 2006). The represented participant in the image is Lady Gaga, who is shown performing. The intensity of her facial expression conveys strength and aggressiveness, which seems to agree with the resounding success the article is discussing. However, no eye contact is made with the viewer. As a result, this aggressiveness is interpreted as directed to someone or something else (the unknown point), and this contributes to representing Lady Gaga not as a person interacting with the online reader, but rather as an economic phenomenon.

Finally, the fact that there is an embedded video deeply affects and expands its meaning potential. Online readers of this website are challenged to go the extra mile and consider not only the interplay between text and static images within the website, but also the interplay between this online article and a news video, which is a different genre but still about the same content and by the same author.

The second website in the data set is a specific post in the blog entitled Brand-as-Business Bites. The blog is embedded in the author's professional website (Denise Lee Yohn), and the top row displays her contact information. The post is dated 9 June 2011, and, similarly to the previous website, it is entitled *Lessons from Lady Gaga*.

As shown in Figure 2, this website uses the following modes:

- written text (including different typography)
- 2 static images
- sound (voice-over): the website has an embedded podcast produced by the same author

Figure 2. Denise Lee Yohn Blog "Lessons from Lady Gaga" (Reproduced with express permission from the author)



The content is once more organized in three columns. The central column contains the main text, the left column has links to share the content via social media, while the right column shows links to other sections of the blog. As mentioned earlier, the post is entitled *Lessons from Lady Gaga*. These lessons are offered in a numbered list. Each item in the list appears in bold type and is introduced by a hashtag, which is consistent with the salience of social media on this website. Bold type is also used in other parts of the text to highlight the take-home message. The reading path of the

page is top-down. In this example, there are 7 hyperlinks embedded in the text, which make the reading path less likely to be linear. Interestingly, 4 of these links redirect the reader to social media (e.g., Lady Gaga's Twitter (X) account).

There are two static images embedded in the text. The first one shows a close-up of Lady Gaga's face. It is a rather conceptual image with no clear vector. She is shown with closed eyes and her hand approaching her mouth, which features a subtle smile. Her attitude is somehow naughty. She is wearing rather ostentatious complements (e.g., rings). As a viewer, we see the represented participant from a low angle, which puts her in a situation of power. All this is very consistent with the lessons listed in the text: having a clear identity, being different, standing for something bigger than yourself, etc.). The second image is a screenshot of the Manifesto of Little Monsters: a text authored by Lady Gaga and dedicated to her fans. It combines a picture of a handwritten text (presumably in Lady Gaga's handwriting) and her portrait. The fact that it is handwritten and not typed makes it more personal, which is also consistent with the lessons listed in the text. At the end of the text, there is a link to an audio file, which is a podcast by the same author. This podcast is a rendition of the text on the website, read aloud by the author.

Concerning the meaning potential of this web, several aspects can affect the way meaning is conveyed in this blog post. First, the lager number of hyperlinks on this website in comparison with the previous one makes the reading path potentially less linear, although it is primarily conceived as top-down. Secondly, the website provides another example of genre embedding. In this case a podcast within a blog post, which is in turn part of a professional website. Interestingly, the podcast has the same content as the blog post becoming a clear example of transemiotization: the same meaning expressed through different modes. Finally, part of the meaning potential of this material is derived from the author and her expertise as a popular business consultant, TED speaker, and successful author. Without this information, credibility may be lost.

The third website in the data set is an online article published in the journal *Business Insider* in 2015. Its title is *Lady Gaga discovered how to be happy when she started saying one word a lot more often.* The article was published after the boom of Lady Gaga, and it discusses how the artist managed to come to terms with her success and reconcile it with her private life. The following modes can be identified on this website:

- written text, occasionally using different typography
- static image: a picture of the artist with her partner
- moving image and sound within embedded videos (one of them about the speech the article discusses)

Regarding layout, the content is organized in two columns: a column with the main content and a secondary, smaller column to the right with videos of other pieces of news in the journal (see Figure 3). The title, name of the author, and date are marked with a different typography. There are also links to social networks on top of the page. The reading path is top-down. The text in the main column is only interrupted once with a hyperlink to another piece of news about the artist's drug addiction. At the bottom of the page, there is a video of the speech the text is describing.

The image is positioned in a salient location, opening the central column. It is a narrative picture with two represented participants (Lady Gaga and her fiancé) and a vector connecting both (they are oriented towards each other). The reader is not involved, as there is no eye contact between the represented participants and the viewers. The impression provided is that of being witnesses of a stolen intimate moment that we would not normally have the opportunity to see.

The multimodal ensemble described above is interesting in terms of meaning potential for several reasons. First, there seems to be some incongruency in using a personal theme in the picture (i.e.,

Figure 3. Schematic representation of the online article "Lady Gaga discovered how to be happy when she started saying one word a lot more often"

Author and date	Social networks
AR D	BAXAAR
Main text	Videos of other pieces of news

a celebrity in an affectionate pose with her partner) to illustrate an economic topic in the text (the article is published in an economic journal, and it essentially deals with the consequences of success). The incongruency is solved when we, as readers, grasp the details of the topic and understand that the speech being reported shares practices that have helped Lady Gaga survive her success and all its implications. Second, once more we can find an example of genre embedding: a recorded rendition of a life speech within an online article. This embedding becomes particularly relevant because the text serves as preparation to understand and interpret the video of the speech correctly. The position of the video at the end of the text supports this interpretation. Finally, the picture also reflects a temporal evolution in the music phenomenon represented by Lady Gaga: it is no longer shown as something unstoppable (as in 2010) or as a well-established, lucrative business (as in 2011), but rather emphasizes the human being behind the phenomenon and how she manages to survive the process.

3.2 The videos

Turning now to the videos used in this unit, the first one, which is used as an introduction to the subject of strategic management, is a Whiteboard animated video. It is called *What is strategy?* and the content of the video is a comprehensive explanation of this abstract and complex business management concept. It was produced in 2015 and its total duration is 8 minutes and 46 seconds. The video makes use of the following modes (see Figure 4):

- static image
- spoken words (narrator's voice)
- written words (and typography)
- visual effects (animations of images and text)

Figure 4. Video "What is strategy?" (Reproduced under CC License)



This multimodal ensemble facilitates the understanding of an abstract, complex economic concept: strategy. In terms of meaning-making potential, some moments in the video are especially thought-provoking. One of them is 0:09- 1:03, which shows a maze from the video game Pac-Man (see Figure 5).

In this example, the interplay between the voice and the written text is very clear, but the interplay between voice and image may not be so straightforward (what is the connection between Pac-Man and the concept of strategy?). In addition, the reference to a 1980 video game can make the video seem old-fashioned and not up to date, which is not in line with the concept of a business strategy.

The second excerpt is 1:04-1:10, which shows the character Buzz Lightyear as a visual representation of a buzzword (see Figure 6).

Again, the connection between the spoken words, the text, and the image may not be entirely clear to some viewers, especially if they are not familiar with the character or with the term *buzzword*. In addition, a reference to an animated character from 1995 might not give the desired impression of being updated and innovative.



Figure 5. First excerpt from the video "What is strategy?

TRANSCRIPT

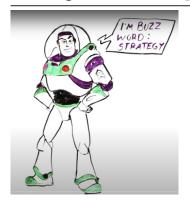
First consider the following strategy statements drawn from actual documents and announcements from well-respected companies:

- -our strategy is to be the low-cost provider
- —we are pursuing a global strategy
- —the company's strategy is to integrate a set of regional acquisitions
- —our strategy is to provide unrivaled customer service
- —our strategic intent is to always be the first mover
- —our strategy is to move from defense to industrial applications

What do these strategy statements all have in common? Well, first of all, none of them are actually strategies. They represent tactics, goals, objectives and descriptions, but not strategies. They are mere strategic threads, small components of overall strategies.

The third excerpt is 8:15-8:46, showing a plant in a pot to represent the four questions that guide the design of a business strategy (See Figure 7).

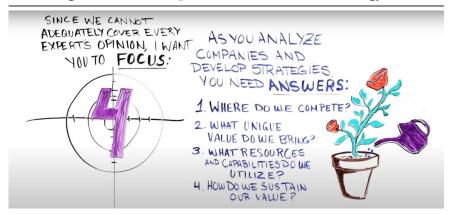
Figure 6. Second excerpt from the video "What is strategy?"



TRANSCRIPT

The problem is that in recent years strategy has become something of a buzzword

Figure 7. Third excerpt from the video "What is strategy?"



TRANSCRIPT

As you strategically analyze companies and/or develop your own strategies you need to have compelling answers to these four questions:

- —first, where do we compete?
- —second, what unique value do we bring to the table in those markets?
- —third, what resources and capabilities do we utilize to deliver that value?
- —and fourth, how do we sustain our ability to provide that unique value?

When you have these answers, you will be well on your way to articulating a clear strategy.

Once more, we find a mismatch between words and images, since the connection between the questions and the flowerpot depicted is not so straightforward. In short, transemiotization, which is a guiding principle of these videos, is not as evident in these latter cases, which makes these excerpts less effective in conveying meaning.

The second video has been retrieved from YouTube and displays a 7-minute interview with Lady Gaga (*Business Insider*). It is entitled *The Fame Monster's Next Act*, and it is dated June 2011. The video is particularly rich in its use of modes, including the following:

- moving image
- clothing
- setting/decoration
- spoken words
- paralanguage
- posture
- gestures
- facial expression,
- music (in embedded videos)
- static image (embedded)

Remarkably, this video also shows examples of genre embedding. At some points, we see static images of album covers and promotional material, and also excerpts of Lady Gaga's music clips. Another interesting aspect to consider is the use of modes that may not a priori be considered as such, but which are proved to convey meaning after closer analysis. An example is Lady Gaga's clothing, which might initially be largely taken for granted, but becomes meaningful when it is used to project a specific public image of the artist (e.g., as a transgressor, and having a style of her own). Another

example is the setting: a luxurious, traditionally decorated room, which might be interpreted as an indication that this is not one of Lady Gaga's usual performances, but a formal, traditional interview. Furthermore, it is the contrast between modes that carries most of the meaning in this video. The contrast between the transgressive clothing and the traditional setting mentioned earlier is one example. Moreover, the contrast between the transgressiveness of her clothing and the humbleness and submissiveness conveyed by her voice and her body posture during the interview (e.g., sitting with her hands on her lap) is quite powerful as a carrier of meaning (see Figure 8), since it establishes a difference between the person and the brand.

To sum up, the multimodal analysis of the websites used in this virtual classroom reveals that they make extensive use of static images and text as modes. In particular, they exploit resources within these modes like typography in the case of written text or angle in the case of images. In addition, layout is also used to prompt a particular reading path. In addition, the use of embedded genres

Figure 8. Reproduction of a screenshot from the video of the interview "The Fame Monster's Next Act"



(Kwasnik & Crowston, 2005) in websites is very salient: in the three cases examined we find embedded videos or podcasts that expand the meaning-making potential of the websites and make the reading path more complex but at the same time richer.

On the other hand, in the case of videos, we find a more varied use of modes. This includes the use of embodied modes like posture, gestures, and paralanguage; disembodied modes like setting or clothing; and filmic modes such as sound and visual effects. As noticed by Girón-García and Fortanet-Gómez (2023), the use of videos in ESP classes is particularly relevant due to their modal density. There is a frequent presence of embodied modes and filmic modes, and as noticed in previous research, they help to increase the motivation and engagement of 'digital natives' (Prensky, 2017).

In terms of meaning-making potential, the most striking finding is that the way meaning is made in these videos depends almost entirely on the interaction between modes rather than on each mode in isolation. For this reason, the occasional inconsistencies between modes in the first video are very salient and deeply affect comprehension. Likewise, the full meaning potential of the second video can only be extracted after similar incongruencies between modes (e.g., transgressive clothes vs. conservative decoration) are noticed and understood.

4. CONCLUSION

In this study, we aimed to carry out a multimodal discourse analysis (MDA) of the cybergenres used in an EMI Business Administration course. We intended to answer the following research questions:

- What are the multimodal characteristics of these genres?
- Do they show recurring patterns of modal configurations?

— What affordances and potential for meaning making are facilitated by the modal configurations identified?

Answering the first and second question, the results of this analysis reveal that the most frequent and modally dense genres used in this course are websites and videos. Likewise, the analysis has highlighted several aspects that are especially relevant in these genres because they are part of recurrent modal configurations. Some examples are typography, layout, or genre embedding. Regarding the third question, these aspects are relevant in websites because they provide essential information about the author, the intended audience, and the context, among other things (i.e., the who, when, where, why, and for whom), and they deeply affect the way meaning is made helping maximize the meaning potential. Similarly, in the case of videos, the complex interplay of modes and the way they create seamless multimodal ensembles is crucial to fully grasping the meaning they are trying to convey. In the first video, there is an interplay of animations, drawings and text, using references to characters presumably known by the target audience. In the second video we have analyzed, the image projected by Lady Gaga is the main recurrent aspect that is conveyed in the way she presents herself through a multimodal ensemble: make-up, hairstyle, and clothes, in contrast to posture, verbal discourse, and paralanguage. Moreover, the multimodal ensemble becomes wider when we look at the way the classes are developed, since students need to read and answer questions they can find in a G-Form in their Virtual Classroom, while they read websites and watch the videos. With these materials, students can grasp how a brand can be communicated and marketed in many different ways.

The cybergenres analysed in this article are illustrative examples of how the modal density of websites and videos multiplies the meaning potential. We believe that, when fully exploited, these genres can provide opportunities to adapt to different learning styles and promote engagement and active participation from students.

The importance of raising multimodal awareness among both teachers and students is brought to the fore when dealing with cybergenres in educational contexts. On the one hand, teachers need to be aware of the modal density of these genres to make an informed selection of materials, and to produce the tasks they will eventually ask students to carry out. On the other hand, students need to be able to extract the full meaning potential of these genres to make sense of them and benefit from a meaningful learning experience.

This study is limited in scope since it focuses on the MDA of cybergenres in the VC of one EMI subject. Further research is needed to probe into the use of these genres in class and to investigate their learning effect in specific pedagogical proposals. Similarly, future studies could cater for other cybergenres used in educational materials, and in the dissemination of science, to facilitate the identification of patterns and differences across them.

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