Article

Knowledge in Images and Sounds: Informative, Narrative and Aesthetic Analysis of the Video for MOOC

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Abstract: The virtual courses developed by higher education institutions incorporate the video format as one of the most used resources in the delivery of their online training offer. Within the different types of audiovisual productions found in MOOCs, the introductory or presentation video of the courses has become an illustrative piece of the new edu-communicative context of distance education, when articulating, in the same work, informative, didactic, and advertising content. The objective of this research work is to study the triple communicative nature of this innovative format following a specific methodology of audiovisual textual analysis. For this, 420 videos of this type of promotional video, belonging to 105 universities and educational centres that have developed MOOC courses for the Miríadax platform, are analysed. After checking the results of the formal characteristics, content structures, discursive techniques, and audiovisual language components of the videos, it is concluded that they are mostly pieces linked to the staging style of the classroom, but that, by enriching the visual appearance of a master lesson with audiovisual resources, take advantage of the narrative, aesthetic, and creative potential of audiovisual and advertising communication to capture the attention of the student-spectator, inform about the characteristics of the courses, offer valuable educational content, and generate an image of the brand for the institution responsible for producing the course.

Keywords: knowledge; didactic video; storytelling; digital media; YouTube; virtual learning; digital marketing; innovation; high education; information

1. Introduction

Didactic video has experienced a very significant growth in the field of e-learning [1,2] due to the ease of production and dissemination of audiovisual content made possible by digital technologies applied to the various forms of online training [3–5]. In addition to the translation or reformulation of conventional videographic formats (video classes, tutorials, etc.), which predate the revolution of the knowledge society [6,7], this expansion of the audiovisual universe has brought with it the creation of new types of content that represent the close interrelation that is taking place between training, information, entertainment, and advertising [8,9].

In this sense, research and high-level scientific publications (WoS, Scopus) have also been immersed in this confluence between scientific knowledge and audiovisual dissemination of information [10,11] and, above all, in the permanent search for new ways of disseminating knowledge [12].

During the COVID-19 pandemic, this transformative process has been accelerated, both in the formative character of educational video and in new ways of disseminating scientific information [13,14], exacerbating the relevance of video in distance, remote, or online education [15].

Every day, in an ever-growing trend, search engines are accessed to find videos or podcasts that teach about a wide range of educational and scientific topics [16–18]: in the

specific field of higher education, audiovisual resources have been decisively introduced into university practice. Huge amounts of multimedia content are produced and consumed for both face-to-face and distance learning degrees [19,20], opening the debate on their institutional fit [21], economic viability [22–24], didactic quality, and effectiveness [25,26] or impact on the scientific community [27].

Similarly, these didactic contents demand new ways of creating stories for platforms such as YouTube [28,29], both in the innovative use of audiovisual languages and interactive techniques [30] and in the reformulation of genres and formats of content creation processes for streaming access [31,32]. The deepening interconnections between education and communication are especially evident in newly created formats that respond to the new needs of e-learning [33–35] and its different forms of assessment [36]. Storytelling applied to learning is an outstanding tool for the dissemination of academic [37] or scientific [38–40] knowledge, generating important audiovisual repositories [41,42], even though we are aware of the possible weaknesses and shortcomings of the use of narrative video [43].

One of these types of innovative videos, typical of YouTube broadcasting [44–46], is the so-called introductory, presentation, promotional, or 'about video' that serves as a gateway to most of the Massive Online Open Courses (MOOC) that can be enjoyed on platforms such as Coursera, EdX, or Miríadax, among others. This specific format demands an in-depth analysis from the perspective of audiovisual production or creation due, first of all, to its interesting hybrid nature, both for the heterogeneity of communicative objectives it poses, as well as for the variety of approaches, components, or narrative or aesthetic solutions it offers.

The introductory video is located outside the course's own training content itinerary with the fundamental mission of making the characteristics of the MOOC on offer known and inviting for a potential student to enrol or register for it. This type of video is disseminated both on the course access page itself and on the open internet ecosystem (YouTube, university repositories, educational websites, social networks, etc.) The format, therefore, has a triple function: to transmit an informative message (to publicise the course), to provide didactic content (a preview of the subsequent lessons), and, from the point of view of institutional or corporate marketing, to promote the course in turn in the form of a spot, trailer or advertorial.

2. Materials and Methods

To address the analysis of the video format of MOOC videos, this research formulates three specific objectives: to analyse the content of the videos and the audiovisual languages used; to detect common characteristics, patterns and didactic, informative or advertising trends in the production of these materials; to evaluate and propose guidelines for improvement according to the divergent needs of educational video creators.

The research sample is made up of the introductory videos of 420 MOOC courses of Miríadax (miriadax.net). This Telefónica platform offers one of the world's leading MOOC course catalogues, with more than 100 educational partners and more than 6 million enrolled students. The 420 videos analysed represent more than 95% of the content currently accessible on Miríadax, that contains a video of these characteristics, # uploaded specifically to the YouTube streaming channel.

The proposed analysis model consists of four blocks:

1. Formal characteristics: producing institutions, views, duration and language.
2. Structure: narrative architecture, constituents and opening formulas.
3. Content: subject matter, itinerary, teaching presentation, methodology, operation and advertising communication.
4. Audiovisual production: original genres, modes of production, languages, and techniques used.

The great thematic and formal heterogeneity of the courses on the Miríadax platform makes it possible to address these aspects in order to create a wide-ranging catalogue of audiovisual production solutions that encompass the possibilities of the introductory video.

MOOCs have been produced by 105 different educational institutions, either individually (99), in collaboration with another institution (4), or with two different partners (2). In the top ten, by number of courses, are: Universidad Politécnica de Madrid (64 MOOCs/15.23% of the total); Universidad de Murcia (22/5.23%); Universidad de Navarra (20/4.76%); Universidad de Cantabria (18/4.28%); Universidad del País Vasco (13/3.10%); Universidad de la Laguna (13/3.10%); Universidad de Salamanca (11/2.61%); Universidad ESAN de Lima (10/2.38%); Universidad Rey Juan Carlos (9/2.14%); Pontificia Universidad Católica de Valparaíso (9/2.14%). From a total of 23 institutions, more than 5 productions were analysed, while from 40, only one MOOC was available.

3. Results

3.1. Characteristics of the Format

The aggregate views of the 420 videos reached 6,244,794 views on YouTube, which gives an average of 14,868.55 views per video. The five most viewed contents are 341/Potencia tu mente (UC) with 174,328 views; 097/Development in HTML5, CSS and JavaScript (UPM) with 149,213; 304/Mindfulness to regulate emotions (UMA) with 142,957; 233/Introduction to programming (Telefónica) with 141,802; 152/Statistics for researchers (USAL) with 124,164. It is significant that, among the top 20 positions, in terms of number of views, 8 videos are related to life, personal, and professional development or growth, 7 to the Internet or new technologies, and 3 to education and research aimed at teachers and professors.

On the other hand, 92 videos exceed the threshold of 20,000 views and 190 exceed 10,000, while a total of 132 videos do not exceed 5000 and 17 do not reach 1000.

In total, the 420 videos have more than 6 million views. The main characteristic of this data is that these materials can go viral individually on YouTube or other social networks, reinforcing the brand image of each institution and of the Miríadax platform itself, without having been accessed exclusively from the course website, but from many different potential windows (search engines, websites, etc.)

The average length of the videos is 3:07 min. The length of the videos analysed varies mainly according to the type of genre to which they belong. Thus, the three longest videos, 280/Lexicografía didáctica española (UM) at 19:20, 334/Pena de muerte y Derechos Humanos (UCLM) at 13:46 and 288/Madrid, History, Architecture and Urban Planning (UPM) at 12:55 (among 7 other videos in the sample that exceed 10 min in length), assume a basic structure of a theoretical classroom lesson, with the teacher(s) playing a leading role, and therefore belong to the didactic genre that reproduces the staging of a master class.

At the other extreme, the 3 shortest videos, among 20 other pieces that do not exceed one minute in length, 345/Preparation for the PMP certification (UM) of 0:31, 88/Comparative civil law with a gender perspective (ULL/UCC) of 0:42, and 71/Create and publish a video game in Unity 3D (ITT) of 0:43, are limited to the format of a spot or advertisement, highlighting its promotional function above other narrative or didactic aspects.

On the other hand, between 2 and 5 min there are 254 pieces, 60.47% of the total. In this range of durations, the videos analysed articulate varied proposals with a clear tendency towards hybridisation of formats: although the educational component, indebted to the lecture, is also present, the audiovisual forms and styles of the report, the animation, or the interview are closer to television formats than to conventional didactic or scientific video proposals, such as the recording of video lectures or the recording of academic activities (conferences, workshops, etc.) The large amount of information contained in the videos analysed, together with the marketing communication elements they introduce, fit in well with these average lengths (Figure 1).

In terms of language, Spanish is predominant with 377 videos (89.76%), followed at a great distance by English with 22 (5.23%), Portuguese with 14 (3.33%), and 3 language combinations: Spanish/Portuguese in 5 MOOCs (1.19%), and Spanish/English and Spanish/Basque in only one occasion each (0.23%).

Spanish is clearly the most widely used language in these productions, most of which are produced by Spanish-speaking institutions, within a platform that is also aimed at a Spanish-speaking target audience. However, it is possible to glimpse the possibilities of translation and subtitling that some proposals present in order to expand their potential audience and their interaction with other academic or institutional contexts.
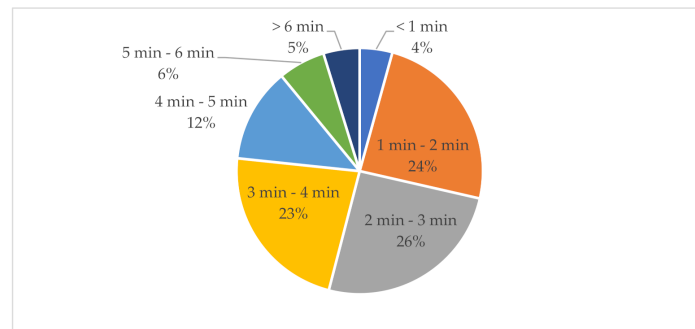

Figure 1. Duration of videos.

3.2. Structure

As it is a hybrid and complex audiovisual format, first of all, the structural analysis of the introductory video is considered. This section includes:

- Constituent parts: blocks, segments, or units.
- Beginning: standardised formula for the beginning. A classification has been established according to four generalised types: welcome or presentation, thematic, interrogation, and story.

Regarding the number of differentiable units, the overwhelming majority of videos are composed of a single block without explicit divisions (286 pieces, 68.10% of the total). Nevertheless, of the length of the video in this typology, the content is not fragmented into sections that combine several audiovisual sequences (for example, a video lecture with archive inserts or a dramatised scene). They are, therefore, recordings that are recorded in single takes or that opt exclusively for a particular audiovisual format (animation, interview, etc.), without taking advantage of other synergies between genres. Thus, videos with 2 blocks (56/13.33%), 3 (42/10%), or 4 (19/4.52%) show complex structures that organise the different parts in a heterogeneous way in order to order, hierarchise, or enrich the content.

With regard to the ways of starting the videos (Figure 2), the welcome to the course modality stands out (258 pieces, 61.43% of the total). In this typology, the teacher addresses the camera, reproducing the usual dynamics of a face-to-face class in which the student attends directly to the teacher's verbal presentation on the blackboard.
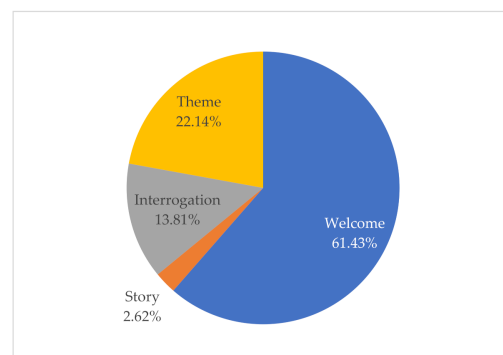

Figure 2. Start-up typology.

Secondly, the videos that begin by showing the MOOC's subject matter in images account for 93 units (22.14%). This is a start more typical of the report or documentary genre, formats that highlight the intrinsic value of the subject matter taught as opposed to other methodological or procedural aspects.

This is followed by videos that begin by asking the viewer one or more questions. Of these, 58 videos (13.81%) opt for this modality, considered to be one of the most effective for quickly connecting with the viewer by demanding their immediate attention.

Finally, 11 pieces (2.62%) start by telling a story, anecdote, or particular example. It is striking that this narrative procedure does not have a greater presence in the exhibition. The different types of narrative mechanisms that can be included in this section (flashback, in media res, practical demonstrations, exercises, problems, games, etc.) are powerful ways of beginning by capturing interest and creating expectations.

In addition, a total of 13 examples (3.09%) opt for a joint alternative: combining several different beginnings. For example, combining a welcome to the course with a game/problem/question to be solved before revealing the subject of the course.

On the other hand, only 11 videos (11.19%) start with recorded or archival images to capture attention with a quick or sensory-appealing montage. It is also significant that only 6 videos (1.43%) introduce a summary or table of contents to preview or synthesise the contents that will be developed later.

3.3. Content

For the specific study of the messages conveyed in the videos, six categories have been established:

1. Thematic: object, subject of knowledge, or general frameworks.
2. Formative itinerary: specific contents (modules, lessons, epigraphs, etc.)
3. Teacher presentation: information about the persons responsible for teaching the course, such as curriculum, affiliation, or other relevant personal and professional data.
4. Methodology: aspects concerning teaching strategies and techniques (flipped classroom, PBL, etc.), materials (videos, forums, etc.), or other explicit ways of approaching learning.
5. Operation: dynamics of the course, such as assessment criteria, tutoring schedules, or the different types of certificates offered at the end of the course.
6. Promotional communication: marketing messages about the course itself, complementary degrees, research groups or projects, or the academic institution responsible for or co-funding the MOOC.

It was found that 419 productions (99.76%) report directly on the subject of the course. This is not very significant because the general content, the subject matter, or the object of study are one of the most basic and necessary appeals when signing up for a MOOC, and it is logical to refer to them explicitly (Table 1).

Table 1. Content included.

Content	Vídeos	%
Theme	419	99.76%
Itinerary	375	89.29%
Teacher	227	54.05%
Methodology	178	42.38%
Promotional	152	36.19%
Operation	107	25.48%

Secondly, 375 pieces (89.29%) specify the course content, in terms of modules, subdivisions, or headings. Leaving aside the videos that already include, in this introductory video to the MOOC, a first master class that forms part of the complete course, this is the section to which most effort is devoted in terms of length. Listing or describing the contents, in the form of an index or itinerary, which will be covered throughout the weeks of the course takes up most of the video's time.

On the other hand, the teachers are presented directly in the video or are referred to as being responsible for the course in 227 pieces (54.05%). Teachers, research groups, professionals, academic managers, or students from other editions of the MOOC highlight their knowledge or experience.

As for the methodology, it has a specific section or mention in 178 productions (42.38%). Consequently, aspects such as innovative ways of teaching, the description of the types of multimedia content available to students, or the way of disseminating them that characterise MOOCs (virtual classroom, email, mobile devices, etc.) do not have the same relevance as the theoretical and practical knowledge covered by the course.

Even less is the presence of data on the internal functioning of the MOOC: only 107 videos (25.48%) include information on procedures, requirements, or tests for the correct development of the course. These messages, due to their temporary or changing nature from one edition to another, because they are provided in other MOOC materials or because they are already considered part of the internal dynamics of the course, appear as brief mentions or appendices in the video.

Finally, 152 videos (36.19%) introduce marketing messages. Taking into account the advertising nature of the format itself, as a sample or audiovisual showcase of the course, the following stand out as promotional values: the acquisition of theoretical-practical knowledge, the exclusive or differential content with respect to the competition, the prestige or quality of the university or training centre, the number of editions, the number of participants who have taken the course previously, the trajectory of the teachers, or the advantages or virtues in terms of employability and use, among others. Likewise, certain academic institutions choose to introduce a series of coinciding resources in all their productions (slogans, bursts of images, headers, etc.) to highlight a common brand identity and a comprehensive corporate marketing strategy.

Considering the combined presence of the types of content that have been differentiated, only 15 videos (3.57%) incorporate all six. In 7 examples (1.66%) only reference is made to the subject matter, while in 78 (18.57%) only one other category of content is added: content (59/14.04%), advertising (12/2.85%), teaching (4/0.95%), methodology (2/0.47%), and operation (1/0.23%).

Finally, the variety of specific content that can be introduced is noteworthy: a test of prior knowledge; specifications on specific profiles at which it is aimed; definitions of concepts by way of a glossary; thanks to other institutions or people; summary of competences acquired on completion; interventions by lecturers or students contributing points of view; advertising of postgraduate or other courses; prizes or job opportunities; proposals for university-business collaboration; dissemination of results of research groups or projects; geographical scope; cliffhanger-type endings ("to be continued...") or conclusions in the form of questions to be answered in future videos, among others.

3.4. Analysis of Audiovisual Production

In the section on audiovisual resources and production techniques, the proposed analysis model is subdivided into three blocks. Firstly, the educational video format used is classified, differentiating between video lecture (on location or on a virtual set), television format (report or fictional) or animation video (Table 2); secondly, the use of titles/headers, key words on screen, or insertion of Power Point presentations is analysed; finally, the expressive resources used in the video are analysed, such as motion graphics, moving image, still image, music, or voice-over.

Table 2. Formats of the videos.

Format	Videos	%
Video lecture	372	88.57%
TV	57 (31 video lecture)	13.57%
Animation	21	5%

The video lecture is shown as the most used format: 372 productions (88.57%). This type of prototypical design of educational audiovisuals is basically characterised by the fact that it presents a teacher on screen, addressing the camera directly. In terms of staging, therefore, it is very similar to a face-to-face master class; however, it is notable for the large number of different specific manifestations, in terms of creative recording and post-production resources, which can be introduced into this usual general scheme. The video lesson combines the expository, verbal, and sequenced nature of the conventional classroom with a battery of audiovisual resources and techniques that modify and enrich its discourse, effectively adapting it to the current language of digital media: the different modalities of "YouTuber" styles, based on a character speaking without intermediation to viewers, or the use of videoconferencing procedures are two types of formats that set trends on virtual platforms and which, in various educational contexts, share narrative strategies, communicative intentions, and audiovisual production solutions with the video-classroom.

In second place are formats that contain elements of television origin (57 productions, 13.8%) such as dramatisations, spots, or reports. More than half of them, 31 pieces, also show features of video class (7.38%), so that, in addition to being included in the two previous sections, they indicate to what extent the videos analysed are closer to the classroom than to fictional, advertising, or informative television genres.

Finally, the animation format accounts for 21 videos (5%). Motion graphics or 2D or 3D animation have a clear didactic potential due to their ease of visually conveying specific content. Despite their relatively small weight in the sample as an exclusive genre, a large number of videos of the other two modalities introduce animated techniques extensively, as will be shown below.

In the video-classroom format, 210 pieces have been produced on virtual sets. These are productions recorded with a chroma key background that is replaced in post-production by various resources (3D environments, animated graphics, etc.), highlighting the idea that, starting from the classroom as the original reference point, visual effects technologies are used to significantly improve the narrative content and the visual quality of the videos.

A "sub-genre" with its own entity within this category of virtual set production is the use of Power Point or Keynote presentations. In other words, a background of slideshows such as those projected in a classroom. There were 90 of the 210 productions incorporating virtual scenography, 42.85%, transfer this visual resource typical of face-to-face teaching to the screen.

In terms of audiovisual resources and languages (Table 3), the first of these is the presence of still images: 154 pieces (36.67%) include some kind of photograph or illustration of a static nature. In today's media, the introduction of images without movement in an audiovisual montage is not considered suitable from an aesthetic point of view, unless these materials are animated in some way in post-production. Again, this is a translation of conventional didactic resources (textbook, slides, etc.) without taking full advantage of the dynamic possibilities of the medium.

Table 3. Audiovisual language resources.

Audiovisual Language	Video	%
Music	219	52.14%
Keywords	161	38.33%
Still Image	154	36.67%
Action Image	149	35.48%
Voice Over	117	27.86%
Motion Graphics	87	20.71%

Similarly, there is also a strong presence of videos with moving images (149 videos, 35.48% of the total). In this case, they are inserts, shots, or recorded resources that are added to the video lesson sequences.

The presence of motion graphics resources is lower. Only 87 videos (20.71%) include some kind of 2D or 3D animation, predominantly diagrams or simple visual compositions. On the other hand, the overprinting of labels with the name of the teacher (Lower Third) is more numerous: 230 videos include this text, 54.76% of the total.

Similarly, the use of keywords (text superimposed on the image to visually emphasize a concept on the screen) is found in 161 videos (38.33%). Of these, in 52 (32.30%) they are incorporated at a rhythm in keeping with the visual or sound content of the video, in 85 (52.80%) there are only a few key words highlighting fragments or specific motifs, and in 24 (14.91%), they are introduced with a much more accentuated frequency that makes them structure the verbal discourse almost exclusively around them.

Finally, in the sound section, music has been added to 219 videos (52.14%), while there is the presence of voice over (conventionally known as voice off) accompanying the images as audio narration in a total of 117 pieces (27.86%). The music (most of the compositions come from archive libraries) is used more as background music, as an almost automatic complement to the discourse of the image, than as soundtracks with technical-expressive, narrative, or emotional capacity. Similarly, the voice over is used with an informative or expository character (sometimes redundant with the graphic elements or with the image itself) rather than with a creative sense that explores the possibilities of locution to provide other meanings or anchors (complementarity, antithesis, etc.) to the discourse shown visually on screen.

A joint analysis of the audiovisual production resources listed leads to the following conclusions. Firstly, the use of these fundamental visual and sound elements of television narrative is somewhat scarce. With the exception of music, none of the techniques or resources mentioned are found in more than 50% of the pieces studied. The scarce use of animation or moving images is surprising, given that these two elements are so predominant in the contemporary audiovisual aesthetics of YouTube.

Secondly, the resources are mostly introduced in a subordinate way to the main discourse, which, as we have pointed out, largely follows the "theatrical" development of a class. The plastic and aural sensation is that still images, signs, or music are incorporated as additions, as complements, and sometimes as superfluous fillers not entirely congruent with the visual language of the main narrative thread.

In this sense, thirdly, a very weak aesthetic connection is detected between the resources found in the same piece: animated forms, archive images, or post-production decisions do not follow a coherent or complementary formal pattern between them, that is, the unity in intentions, developments and results expected of an audiovisual work is not perceived: in the same video, very varied styles of illustrations can be found, music not in accordance with the theme, several different typographies, or even editing techniques that respond to divergent or incoherent editing patterns.

Finally, if the use of audiovisual resources is meagre and not very homogeneous and integrated, many of the most important techniques of audiovisual language do not stand out either for their presence or for the concrete way of articulating them: the scale of shots, camera movements, or the potential of photography or music to tell a story are not used; nor is a narrative progression achieved through the use of the techniques and grammatical conventions of image and sound that allow the complete development of the sequences of a story to be detected.

However, it is worth highlighting a considerable number of particular pieces which, as prototypes or outstanding models, show the creative possibilities of the video presentation format, not only when it comes to using audiovisual resources and techniques with a professional finish, but even going a step further when it comes to innovating in the didactic field of this type of production. Namely, on the one hand, they introduce expressive codes and audiovisual production procedures from cinema or television, but on the other hand, they take advantage of the opportunities for visual and sound innovation offered by video teaching: the heterogeneous narrative and staging resources that allow a face-to-face class

enriched with texts or animations, an online forum energized by the community, or an interactive multimedia product, among others.

The analysis of these specific productions requires a different methodological approach to the one used in this work, one that focuses on the particular micro-analysis of the most outstanding elements of audiovisual content and form. A study based on the search for, comparison, and evaluation of the difference, beyond the common features or patterns that have been addressed in this research.

4. Discussion

The results of the analysis carried out highlight the potential of educational video for online learning due to its complexity, variety, and creative possibilities. Informing, educating, and entertaining are inseparable objectives of these audiovisual formats for MOOCs.

However, according to the research carried out, e-learning through video should be studied and criticized from a broader perspective that puts the use of audiovisual content for learning in context. That is to say, as this work has shown, most of the videos analysed follow writing and production guidelines that resemble the development of the staging of a conventional classroom lecture: there is a long way to go in order to generate content that does not merely attempt to transfer the language or structure of the classroom to the screen.

In this sense, two fundamental questions need to be considered: Are MOOCs effective and, consequently, do MOOCs, and online learning as a whole, have a future in university higher education?

Evaluating performance in MOOCs, as in this specific case at the Universidad Politécnica de Valencia [47], is therefore a fundamental task. Similarly, measuring the performance of each audiovisual piece, through metrics, surveys, etc., is an unavoidable challenge. Several studies address these core issues [48,49], with an emphasis on relating learning outcomes to new forms of audiovisual consumption.

The various sections studied in this research in terms of subject matter, structure, communicative strategy, or audiovisual production, show that the essential question to ask is whether a student who plays a video or enrols in a MOOC acquires the necessary competences [50] or, despite the feeling that they are learning, that they are being trained, they are not actually achieving the previously established learning objectives.

In this sense, a very interesting debate about the function of about videos opens up: Are these introductory videos representative of the rest of the videos of a particular course? As seen above, when they include didactic functions (anticipating the course content) or when they advance narrative or branding values. Although introductory or presentation videos do not have a direct didactic function, they are a fundamental component of the overall design of the MOOC, since they serve to illustrate to the student what the fundamental curricular components of the course are, and they are too a basic asset in the decision to take the course or not.

Moreover, in an increasingly complex and saturated space, these videos allow the course to stand out from the rest of the offer. Certainly, on many occasions, the videos respond to a design based on the logic of marketing messages, but this fulfils a basic function of differentiation, while, at the same time, allowing some fundamental elements of the narrative aesthetics of the rest of the course videos to be shown.

The COVID-19 pandemic and the subsequent explosion of e-learning [51] have only reinforced this idea. In this sense, video is a privileged medium for disseminating and sharing knowledge, but the MOOC, as an educational format that contains these audiovisual productions such as the about video, is giving way to other forms of online learning that are more open, less rigid and indebted to face-to-face courses, such as the content disseminated on social networks or the training materials that do not belong to formal education and that flood YouTube or Twitch channels.

The debate, therefore, should be about producing quality audiovisual content that truly disseminates educational and scientific knowledge and adds value to education,

rather than flooding face-to-face or online education with content that consumes students' time without providing them with systematic, deep, and long-lasting learning.

5. Conclusions

Teaching methods, using audiovisual content, are experiencing a clear boom due to the unstoppable development of learning society technologies. Whether as resources that form part of a MOOC, or as independent pieces shared on YouTube or social networks, educational video is reinventing itself both in the established academic contexts of higher education and in the heterogeneous paths of autonomous or self-managed learning.

The introductory video of MOOC courses on platforms such as Miríadax is an example of an audiovisual resource that articulates, in a relatively innovative way, several different types of audiovisual content and resources: video lectures, video notes, screencasts, videoconferences, reports, interviews, animations, and advertising spots. In this sense, their open and inclusive nature makes this type of production a remarkable vehicle for advertising the course (informing), providing valuable educational content for the student/viewer (training), introducing teaching into the audiovisual leisure universe we inhabit (entertaining), and communicating the brand values of the institution responsible for the project (advertising).

According to the analyses carried out, this type of format still has a long way to go from a didactic, narrative, and aesthetic point of view, but it is already possible to appreciate very satisfactory results in terms of offering an educational, communicative, and entertaining experience of manifest quality for the user. The use of the attention span of the student/viewer; the incorporation of the universal languages of image and sound to achieve significant and lasting learning results; the connection of audiovisual content with our daily routine of using computer or telephone devices or the possibility of sharing or reworking the materials in increasingly open academic contexts (virtual courses, university YouTube channels, social networks, etc.), are some of the potential advantages of these teaching resources.

Therefore, how should these audiovisual materials for e-learning be produced? Based on the analysis of trends in both content and discourse, an overview of the style of video currently being produced can be composed, but above all, there can be an open discussion about what kind of videos can be created in the near future: short pieces (around three minutes); less influenced by the staging of the explanatory lesson and closer to other genres such as animation or fiction; more heterogeneous in terms of content (introducing relevant information on methodologies or the functioning of the course); taking advantage of audiovisual narrative techniques (providing storytelling mechanisms in the plot structures, for example); that make use of more varied, current and, above all, aesthetically interrelated audiovisual production procedures in the editing and that take advantage of the opportunities offered by digital technologies in terms of free access, the creation of different versions depending on the devices used (productions for computers, mobile phones, television, etc.), dubbing or subtitling, etc., and the use of the latest technologies in the production process), the dubbing or subtitling of the same video in different languages, or the incorporation of multimedia, interactive, or collaborative elements.

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