Transmedia literacy competences of Journalism students: production and editing of informative multimedia content

Competencias transmedia en estudiantes de Periodismo: producción y edición de contenidos informativos multimedia

Habilidades transmídia em estudantes de Jornalismo: produção e edição de conteúdo informativo multimídia

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Abstract

The paper analyses the use of multimedia tools that young people use in order to communicate a journalistic product. The study focuses on the new digital platforms of journalistic content and examines the results of a research that explores the competences of "transmedia literacy" in Journalism students of the Autonomous University of Barcelona (UAB) over several courses. The text examines 28 multimedia reports presented by students through a quantitative and qualitative content analysis, and introduces the opinions of three focus groups with the authors of the projects. The study shows that the students confer a prominent role to the visual elements inside of their own reports. The analyzed works demonstrate, however, that the emotive components of the stories ignore aspects of transmedia journalism, and that among the students there is a terminological confusion about what a transmedia product is. The article identifies the prevalence of instrumental or technical literacy, linked to the inclusion of pictures and audio-visual content in their products, but not critical, both in the discourse and in the contents created by the students.

Key Words: Transmedia; Journalistic competences; Transmedia journalism; Informetive content; University education; Media literacy

Resumen

El artículo se aproxima al uso que los jóvenes realizan de las herramientas multimedia cuando deciden comunicar profesionalmente un producto periodístico. El estudio está centrado en las nuevas plataformas digitales de contenido periodístico y examina los resultados de una investigación que indaga las competencias del "alfabetismo transmedia" en los estudiantes de Periodismo de la Universidad Autónoma de Barcelona (UAB) a lo largo de varios cursos. A partir de 28 reportajes multimedia, se aplica un análisis de contenido cuantitativo y cualitativo realizado sobre los trabajos presentados por los alumnos, e introduce las opiniones de tres grupos focales con los autores de los proyectos. El estudio demuestra que el alumnado confiere un protagonismo destacado a los elementos visuales relacionados con sus proyectos de curso. Los trabajos analizados demuestran, sin embargo, que los componentes emotivos de las historias desatienden aspectos del periodismo transmedia, y que entre los estudiantes existe una confusión terminológica sobre

qué es un producto transmediático. El artículo identifica la prevalencia de una alfabetización instrumental o técnica, ligada al manejo adecuado de imágenes y elementos multimedia, pero no crítica, tanto en el discurso como en los contenidos creados por los estudiantes.

Palabras clave: Transmedia; Competencias periodísticas; Periodismo transmedia; Contenidos informativos; Enseñanza universitaria; Alfabetización mediática

Resumo

O artigo aborda o uso que os jovens fazem das ferramentas multimídia quando decidem comunicar profissionalmente um produto jornalístico. O estudo centra-se nas novas plataformas digitais de conteúdo jornalístico e examina os resultados de uma pesquisa que investiga as competências de "literacia transmídia" em estudantes de Jornalismo da Universidade Autónoma de Barcelona (UAB) ao longo de vários cursos. Com base em 28 reportagens multimídia, uma análise de conteúdo quantitativa e qualitativa é realizada sobre os trabalhos apresentados pelos alunos, e contempla as opiniões de três grupos focais com os autores dos projetos. O estudo mostra que os alunos dão um papel proeminente aos elementos visuais relacionados aos seus projetos de curso. Os trabalhos analisados mostram, no entanto, que os componentes emocionais das histórias desconsideram aspectos do jornalismo transmídia, e que entre os estudantes há confusão terminológica sobre o que é um produto transmídia. O artigo identifica a prevalência da alfabetização instrumental ou técnica, vinculada ao manejo adequado de imagens e elementos multimídia, mas não crítica, tanto no discurso quanto nos conteúdos criados pelos alunos.

Palavras chave: Transmídia; Habilidades jornalísticas; Jornalismo transmídia; Conteúdo informativo; Educação universitária; Alfabetização midiática

1. Introduction

The new ecology of media inaugurates a conceptual and terminological analysis which affects society and, in particular, our communication processes. In different spheres of life an environment has been created in which communication has assumed a critical role (Piscitelli, 2002). From the holistic approach (Postman, 1970)

we find ourselves in a scenario of transformations in the structure and typology of messages and, ultimately, in all communicative processes. We are now in a new era of media ecology (Scolari, 2013a, p. 1418) which redefines environments and generates clear effects on the receptors of information.

The emergence of new technologies propelled an accelerated process of instrumentalization which introduced a technical ideology into society (Wolton, 2000). Transmedia narratives, which are to be found across different platforms and media, offer interesting alternatives to digital stories that needed to overcome the qualification of 'multimedia' (Jenkins, 2006, p. 16).

Together with the new landscape in communication, the other great challenge is in the field of education. The emergence and swift consolidation of the figure of the 'prosumer' (Toffler, 1980) within the framework of a collaborative culture (Jenkins, 2008) defines a user profile with a particular conception, assessment and use of information, platforms and communicative tools. Within this scenario, which is presided over by processes which promote dialog, convergence and collective intelligence (Lévy, 2007), new literacies have emerged which surpass the definition of media literacy. This combination of changes creates challenges for both communicators and educators. Piscitelli, Adaime and Binder (2010), Tramullas (2016), Pérez Tornero and Celot (2009), among others, have warned of the importance of reforming education in order to have an impact on the critical and analytical skills of the so-called 'millennials' (McCrindle & Wolfinger, 2010, p. 202).

This paper analyzes the acquisition of "transmedia literacy" skills of journalism students from the Autonomous University of Barcelona (UAB) from four academic years (2013 to 2016). The study analyzes quantitatively and qualitatively a sample group of students doing their final projects for the second-year subject called "Multimedia and Interactive Journalistic Writing", which introduces them to the fundamentals of online narratives.

The research is structured around the following question: "What parameters do students consider in the journalistic conception and production of their transme-

dia stories?" In relation to this question, the following working hypotheses are considered:

- H1. Students neglect certain aspects related to their choices and fail to contrast and verify the multimedia resources used in their projects.
- H2. Students acquire a great capacity to develop creative projects and formulate informative proposals that go beyond the structure of a traditional press publication.
- H3. Audio-visual and social media content play a leading role in the conception of students' journalistic transmedia projects.

1.1. Millennials and Transmedia: Story, World and Experience

Interactive multimedia content has led to a revolution (Castells, 2003) which laid the foundations for 'cyberculture' (Lévy, 1999, 2007). The combination in the same message of textual, visual and audio elements (accompanied by interactivity) multiplied the options of defining and articulating all kinds of stories. The term "multimedia" began to accompany a wide range of projects, products and services. Some authors even alluded to a 'false multimedia' to refer to messages characterized by a plethora of information which causes a loss of efficacy. Subsequently, the term "mashup journalism" turned the journalist into an assembler of itineraries or "routes" of a hyper-textual nature which connected their audiences with other existing online resources. This type of content represented a significant shift in the convergence process of resources and assumed the essence of the ancient palimpsest which had now turned digital, multimedia, interactive and collaborative (Tejedor, 2007, p. 19).

Currently, transmedia, a term whose origins can be attributed to Kinder (1991) and Jenkins (2003), has been consolidated as a new mode of storytelling which incorporates a combination of media and internet platforms. The concept of transmedia (Klastrup and Tosca, 2004, p. 409) alludes to a communicative scenario where situations and experiences are generated beyond the stories told (Costa, 2013). Transmedia stands out for the large number of contributions and creative touches audiences make to the stories told. On the one hand, transmedia grants a

leading role to users (as true readers-authors) in the processes of dissemination, enrichment and viral spread (Scolari, 2013a) of content which is then converted into stories. On the other hand, it is seen as a process that "activates communication dynamics" and determines the "rules that govern communication flows in the digital ecosystem" (Carrera, et al, 2014, p. 543). The research identifies an accelerated increase in the use of online platforms (AIMC, 2017) as well as an inclination towards devices and applications which promote interaction, horizontalization, and collaborative logic which is typical of Web 2.0.

The participation, interaction and collaboration of Internet users (Pratten, 2011) are intrinsic features of products and transmedia processes within the framework of a scenario presided over by "millennials" ("Millennium Generation" or "Generation Y") and the ever-increasing "Generation Z", both of which introduce novelties and research challenges in communication and education (Francese, 2003).

2. Theoretical framework

Transmedia messages promote re-adaptation and constant integration of content (Marfil-Carmona, 2013, p. 140). In this way, the user (prosumer) and the creator of the content share competences: both can define, create, enrich, disseminate, etc. The reticular approach has found in the area of entertainment its main field of cultivation. Nevertheless, journalistic or other types of stories have begun to incorporate the communication potential offered by the transmedia approach. Larrondo Ureta (2016, p. 36) considers that journalistic and fictional transmedia share basic aspects such as multimedia convergence and participatory culture.

Academic research done on transmedia has focused mainly on the study of the types of stories of transmedia products and on the role of audiences or admirers (Scolari, 2017; Cascajosa and Molina, 2017). However, the concept of "transmedia literacy" has not been extensively studied in terms of its conceptual significance, or following its main analytical and operational dimensions. This is one of the objectives of the R&D and innovation being carried out on transmedia presented in Horizon 2020, led by the University of Pompeu Fabra¹. The research establishes

the need to project the traditional idea of media literacy onto new areas in which the evolving concept includes collaborative culture, informal learning and skills acquired outside of school; this is in addition to allowing for competences such as the emotional element, among others (Scolari, 2016, p.19).

	Literacy	Media literacy	Transmedia literacy	
Media support	Books and other printed texts	Broadcasting (TV)	Digital networks	
Semiotics of the medium	Verbal (read-ing/ writing)	Multimodal (audio- visual media)	Multimodal (in-teractive media/ transmedia)	
Questioning of the subject	As being illit-erate	As a consumer (spectator)	As prosumers	
Objective of the action	Develop reading and writing skills	Develop critical spectators and producers	Develop critical prosumers	
Learning envi-ronment	Formal (school)	Formal (school)	Informal (extra-curricular)	
Theoretical references	Linguistics	Theory on the ef- fects of media	Cultural studies / ecology of media	

Table 1: Literacy, media literacy and transmedia literacy. Source: The authors' work following Scolari (2016, p. 21)

There exists a tendency to establish specific literacies such as news literacy, film literacy, visual literacy, among others, which would form part of media literacy in general (UNESCO, 2013, p. 27). These varying types of literacies act as an umbrella concept which encompasses the set of competences users need in order to function critically and with solvency in a world of media, genres and formats. Transmedia would also form part of media literacy within the current context (Pérez Tornero and Celot, 2009, p. 14).

Progressively, new conceptions and terminological proposals appear, such as "multiple literacies", used by the Finnish government in their last educational reform (Palsa and Ruokamo, 2017). Multiple literacies "represent a multiplicity of communication channels, both print and electronic, where the textual is often

related to the visual, the audio to the spatial [...]; The text is increasingly considered multimodal" (Leino, Linnakylä and Malin, 2004, p. 254).

Therefore, the link between multiple literacies and transmedia literacy would appear to be latent. With this idea in mind, Jenkins proposed the term New Media Literacies (2006, pp. 170-171), where 'transmedia' was one literacy whose objective was to define the necessary competences for young people to impact the culture of participation².

The New Media Literacies constitute the core cultural competencies and social skills that young people need in our new media landscape. We call them "literacies," but they change the focus of literacy from one of individual expression to one of community involvement. They build on the foundation of traditional literacy, research skills, technical skills, and critical analysis skills taught in the classroom (Jenkins, 2006, p. 13).

For this reason, transmedia literacy invites us to rethink the skills that are necessary for the 21st century based on the cultural dynamics of young people and in contrast with formal education. As stated by Vázquez García (2015, p. 23), tertiary education cannot be left behind in the consolidation of new skills. These cultural dynamics are related to the necessary competences in professional settings, such as collective organization through networks and "multi-tasking" information management (Pérez Latorre, 2015). The role played by transmedia in the creation and development of stories with journalistic ends constitutes an appropriate activity for understanding the dynamics of information production and skills acquisition.

3. Method

This paper aims to discover the characteristics of transmedia journalism and transmedia literacy acquired by second-year students of the UAB journalism degree in the development of the end-of-course project in the subject of "Journalistic Writing for Multimedia and Interactives" (subject code: 103109). The study explores the projects submitted by the students and analyzes the competences derived from the educational practice on transmedia literacy.

In order to assess the competences related to transmedia and media, the students were given a performance assessment which consisted of preparing a transmedia news report on Christmas in Barcelona with a maximum duration of 12 hours (from 9am to 9pm). Performative assessment is understood as a way of regulating, controlling and measuring the results of an educational process as a method for carrying out critiques, comparisons and exhibitions (Calderón and Oliveira-Junior, 2016, p. 43). The sample, assessed through a content analysis, consisted of a random selection of 28 projects submitted by students between 2013 and 2018. Seven projects were selected from four school years, which were prepared in groups of between four and six students. The analysis of the projects was complemented with three focus groups of five students each which took place during January 2019.

Grandío-Pérez (2016) first proposed a series of indicators for the assessment of transmedia literacy based on the dimensions as outlined by Ferrés & Piscitelli (2012). These were then applied to the transmedia context following the proposal by Jenkins (2010). The proposed indicators by Grandío-Pérez were used to build semi-structured questions based on the work of the focus groups for the content analysis work.

Dimension	Indicators	
Language	 Express oneself in a multimodal way. Establish connections between texts, codes and media. 	
Technology	 Know how to circumnavigate hypermedia, transmedia and multimedia environments. Have the ability to use multimedia and multimodal tools: reception and interaction. Choose one's own media. Interact with people and groups in environments which are more plural and intercultural. 	

Dimension	Indicators		
Production	 Work collaboratively in the development of multimedia and multimodal products. Share information via different communicative environments. Have a responsible attitude toward all online and offline identities. Have the capacity to manage the concept of individual and collective authorship, and to take advantage of resources such as creative commons. 		
Ideology	 11. Assess the reliability of sources of information, as well as search for, organize, contrast, prioritize and synthesize information from different environments. 12. Have an ethical attitude when downloading products off the Internet. 13. Make the most of new communication tools to share values and contribute to improving the world. 		
Aesthetics	14. Relate media productions to other artistic pursuits.15. Appropriate and transform artistic productions, promoting creativity, innovation, experimentation and aesthetic sensibility.		

Table 2: Indicators for measuring transmedia literacy.

Source: Grandío-Pérez (2016, p. 91).

The variables related to transmedia storytelling, and applied to journalism, stem from the work of Alzamora and Tárcia (2014) and from the assessment proposal for new media literacies (NMLs) carried out by Dawson and Siemens (2014). These authors value transmedia through the indicator of "use of tags, conversation flow across tools / spaces" (2014, p. 297). In relation to the characteristics of transmedia journalism, the study includes the dimensions defined by Jenkins (2009) which are adapted to the journalistic world by Martín and Rodríguez (2017, pp. 25-32). The variables applied to the content analysis are:

- a. Spreadability: The news must be able to be shared through various online networks as well as encourage and allow for reader interaction.
- b. Drillability: The news encourages the reader to delve deeper into the information through an invitation to search for more or to dig deeper into the news (Martín and Rodríguez, 2017). Scolari (2013b, p. 44) affirms that audiences will drill into the news if there are extensions and more news content.

- c. Continuity: The product "maintains editorial focus and journalistic style simultaneously as the story expands in different media and platforms" (Martín and Rodríguez, 2017, p. 26). This characteristic is applied to students' projects when the information is found on the web and networks, and provides a unified, continuous and consistent experience (Jenkins, 2009).
- d. Seriality: The story unfolds on different platforms: "the chunks of meaningful and engaging story information have been dispersed not simply across multiple segments within the same medium, but rather across multiple media systems" (Jenkins, 2009; Moloney, 2011, p. 29). The variable is applied if the content published on social networks is complemented with the information that is given on other platforms, without duplicating the information.
- e. Extractability: News content can be extrapolated to the reader's daily life (Moloney, 2011; Scolari, 2013b, p. 40): For example, a video tutorial on how to make Christmas decorations.
- f. Worldbuilding: Through the news different worlds are created by the people interviewed or by the places described (Scolari, 2013b, p. 40). "The main story can unfold allowing alternate stories based on different characters and circumstances" (Moloney, 2011, p. 28).
- q. Subjectivity: The news is dealt with from different points of view as it represents "the views of multiple characters or dimensions within the story" (Moloney, 2011, p. 30). The analysis will take into account whether the story offers a variety of views on the chosen topic (from the buyer and the seller's point of view, for example).

The immersion variable was eliminated from Jenkins' (2009) original proposal due to its complexity exceeding the framework of our study. The multiplicity variable was also dropped as it is present in all of the students' projects. The performance variable was equally discarded as the narrative creation of fans/admirers is a significant fictional element not common in journalism. These transmedia aspects proposed by Jenkins were adapted to our study so that they could function as analysis variables. The following template³ lists the items studied both on the projects carried out by the students and on the work done in the focus groups.

Analysis dimension	Variable	Categories	
Informative and transmedia	Contains images	0. No 1. Yes	
	Contains video		
processing	Contains podcasts		
	Contains interactive tools		
	What interactive tools?	Open	
	Extension to social networks - Facebook - Twitter - YouTube - Instagram	0. No	
	Interaction with audiences 1. Yes		
	Interaction on social net-works	1	
	Use of tags		
(Alzamora and Tárcia, 2014; Dawson and Siemens, 2014)	Texts with hyperlinks	O. No 1. Yes, mainly own content 2. Yes, mainly external content 3. Both equally	
	Types of Materials	Mainly own material Mainly external material Both	
	Captions and credits 0. No 1. Yes		
	Sources	Documentaries Personal Both	
	Qualitative assessment	Open comments from researchers	

Analysis dimension	Variable	Categories
Storytelling transmedia in journalism (Scolari, 2013b; Martín and Rodríguez, 2017; Moloney, 2011)	 Spreadability Drillability Multiplicity Extractability Worldbuilding Subjectivity 	0. No 1. Yes
	Continuity Seriality	Continuity Seriality
	Qualitative asessment	Open comments from researchers

Table 3: Analysis Template. Source: Authors' own work.

4. Results

The results obtained, particularly in the focus groups, demonstrate that, for students, the concept of story acquires important nuances when moving from analog to digital. The analyses of the students indicates that they see analogical stories as being more rigid, ordered and linear while digital stories are seen as being more versatile.

Definition of an analog story	Definition of a digital story
"It's a story that tells something differ-ent".	"The most important thing takes place at the beginning".
"It's structured which has a beginning, middle and end".	"You can direct where your story is going".
"It tells the story in order".	"It's a type of story which takes advantage of the support mechanism to introduce more options and resources".
"It gives important information for the sender and receiver".	"It makes the story more dynamic. You don't simply read a text. The story itself moves and you have a way of travelling along with it".

Table 4: From analog to digital stories.

Source: Authors' own work taken from the focal groups studied.

However, terminological confusion was detected in the identification of the elements which define a transmedia story. At the conceptual level, students do not have a full grasp of the idea behind a transmedia story. They see transmedia as containing a set of elements and characteristics which combine aspects that are aesthetic, multi-directional, and current, among others.

Interactivity	Visualization	Contrast and verification of sources	Reliability	Visual	Unique (different and original)
Fragmentation (not linear)	Synthesis	Multi-platform	Evolution	New	Content crisis
Production	Variety of media	Variety of audiences	Varied consump- tion	Possibilities	Adaptation
Audio-visual	Simple	Accessible and easy to use	Varied	Multi-platform	Technology in favour of content

Table 5: What are the ingredients of a transmedia story? . Source: Authors' own work taken from the focal groups studied.

Regarding multiplicity, 100% (all 28) of the transmedia projects have images while 82% (23) contain videos. However, audio is not so prominent as only 25% (7) of the projects contain sound despite the fact that tools such as Ivoox or SoundCloud, among others, offer students opportunities online. On the other hand, students incorporate in their projects many interactive tools. In total, ten different tools have been identified. The most used is Infogram with 29% (16), followed by Google Maps with 22% (12) and Thinglink with 18% (10). 7% (2) of the projects had no multimedia tools, 25% (7) had only two while 33% (9) included up to three multimedia tools. Only one project used four multimedia tools⁴.

These quantitative data can be analyzed qualitatively as the inclusion of tools does not affect their exploitation. For example, in most cases Google Maps simply showed the locations where the projects were carried out; however, students did

not create interactive maps with additional information offering users more options. Similarly, students used a lot of videos but only recorded the ambiance of places without exploiting the expressive capacities of mobile journalism (MoJo): Nor did students take advantage of mobile phones to film and edit. Most audiovisual productions included in the reports were video-recorded environments which present a static, single-sequence shot without editing, interviews, or an audiovisual narrative. However, there were some exceptions, such as Loterias y Navidad (Lotteries and Christmas)⁵ or Las Navidades del Cambio (The Christmas of Change)⁶ whose reports included a greater audiovisual conception, despite the fact that the work as a whole was not outstanding. Students in the focus groups recognized that they concentrated on the production of videos which they personally preferred. They also realized that they made a basic use of visualization tools without a real intent to delve deeper into the content.

Regarding the materials the students shared, 79% (22) are contents of their own creation. However, 18% (5) built their content from external materials and from other sources they obtained online. Finally, 4% (1) combined both resources equally, i.e. their own creations and existing online resources.

With respect to the use of hyperlinks, which is a crucial aspect in the transmedia narrative (Scolari, 2013b), 32% (9) did not contain any hyperlinks. Furthermore, when these exist, they were used to link to external content in 54% (15) of cases, compared to the promotion of material from the platform itself, which occurred only in 7% (2) of cases. In 7% of the reports (2) an equal balance was detected between both types of links. The labelling of content using keywords or tags is used only in 14% (4) of the projects. In these four groups the students recognized the lack of informative depth in managing their initial ideas. Thus, the use of stories from different platforms was not intended as a strategic element. Social networks, for example, were included in some cases, "almost because they had to be, but not as a fundamental part of the narrative" (Student 1). As regards coordination between the online platform and social networks of the same product, in only two cases is there a type of interaction⁷ (Jenkins, 2009):



Figure 1: Screenshots of the webpage and Tweets from: "The Smile of Christmas", done by students.

Despite the fact that interaction and conversation generated by platforms is one of the main elements of transmedia (Alzamora and Tárcia, 2014; Dawson and Siemens, 2014), students in the focus group pointed out that they prioritized content and aesthetic design of websites ahead of interaction. The results also show that only 21% (6) of the reports promoted interaction with the audience. For example, some projects encouraged the audience to submit their own Christmas photos⁸, following the crowdsourcing trend (Moloney, 2011; Carniel Bugs, 2014): Others allowed the audience to express their voice through surveys⁹, encouraging comments from readers on Facebook¹⁰, or the verification of Christmas lottery numbers by Internet users¹¹. The presence of social media and platforms is significant, led by YouTube (54%), Twitter (39%), Instagram (11%) and Facebook (4%).

The majority of proposals analyzed (75%, 21 projects) do not present characteristics linked to experimentation, innovation and artistic creation in the conception and development of their products (Grandío-Pérez, 2016). However, seven of the studies analyzed (25%) do present some type of innovation. The following examples stand out: *Spreading excitement: How disadvantaged children spend their Christmas*¹², which gives online coverage of Christmas day in different multimodal formats; *Low Cost Christmas*¹³ and *Interactive Barcelona: Christmas* 2.0; *Traditions and Technology*, both of which take a similar theme and link stories from different platforms. Another representative project is *We Are All Christmas*¹⁴, which invites readers to interact and follow a journalistic story through an immersive format.



Figure 2: An example of immersion: "Your path" and "We are all Christmas", done by students.

Students in the focus groups recognized that carrying out the project allowed them to develop a sense of the aesthetic with regard to transmedia literacy and to discuss its representation in groups. Although their projects do not indicate high levels of innovation in the gestation of their ideas, students carried out important work in the design of their websites, as well as in the creative assessment of their group discussions.

The negative habit of not citing sources was detected (Alzamora and Tárcia, 2014; Grandío-Pérez, 2016). 64% (18) of the projects had captions accompanying graphic materials, which is a low percentage when considering the importance of copyright in digital environments and in journalism (Grandío-Pérez, 2016). More specifically, 9% (5) never alluded to the source of their information, 18% (10) mentioned it in passing and 24% (13) always cited their sources. For the execution of their projects, 61% (17) of students consulted personal sources, and only 11% (3) incorporated documentary evidence. In 29% (8) of the cases, sources are both personal and documentary. Thus, the category of subjectivity related to transmedia journalism (Moloney, 2011) also had a lower value than expected had students exploited the inclusion of different points of view on a given topic.

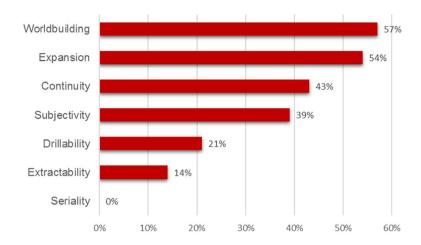


Figure 3: Presence of transmedia storytelling categories (Jenkins, 2009) in the projects analyzed.

Source: Authors' own data.

Two projects stand out as good examples of extractability. On the one hand, *Gastro-Christmas in times of crisis*¹⁵ shares with readers a series of recipes for Christmas dishes. On the other hand, *Lotteries and Christmas* spells out the statistical probability of winning the lottery at Christmas. The content in both cases is linked to users' daily lives: "It allows fans to take certain aspects of the story into their daily lives" (Moloney, 2011, p. 28). The discussion about this variable in the focus groups allowed students to recognize a social function in their journalistic practice: "Some of what we do in practice can be extrapolated to people's daily lives. I think our work may have the capacity to influence people" (Student 4). Students also recognized a journalistic as well as an entertainment impact, but they did not see their work as generating any serious social effect beyond making people aware of a specific problem associated with Christmas (social inequality, poverty, consumerism, etc.).

Similarly, the projects studied tended to focus on the continuity variable (Martín and Rodríguez, 2017), with 43% (12) doing so, while none of the projects made any use of the concept of seriality (Jenkins, 2009; Moloney, 2011). In any case, more than half the exercises, 57% (16), do not use their own network of social media which utilize transmedia products. Regarding the expansion variable, it is important to note that 46% (13) of the projects had icons enabling them to be

shared by networks; these are tools which focused entirely on continuity in the analyzed projects.

Finally, we wish to recognize the ideological and evaluative characteristics in the production of informative content on the part of the students who recognize that there is value and a social approach associated with practice. Students can see that the multimedia journalistic product carried out in their projects leads to the construction of values and citizenship. They also recognize the emotional component of a story built within a specific thematic context (Christmas), although some tried, precisely, "to destroy the cliché and offer another way to celebrate Christmas away from consumerism" (Student 11).

5. Discussion and conclusions

Our study aimed to analyze and assess the parameters considered by students of journalism in the conception and production of transmedia stories. Our research allows us to articulate a set of conclusions that validate Hypothesis 1 ("Students neglect certain aspects related to their choices and fail to contrast and verify the multimedia resources used in their projects) and Hypothesis 3 ("Audio-visual and social media content play a leading role in the conception of students' journalistic transmedia"). However, Hypothesis 2 ("Students acquire a great capacity to develop creative projects and formulate proposals that go beyond the structure of a traditional press publication") can only be partially corroborated. The main conclusions of our study are as follows:

• Lack of self-perception of transmedia skills: Students do not have a clear idea of the characteristics and potential of transmedia and, therefore, of its possibilities in articulating news-worthy stories. The possibility of building worlds or even universes with communicative and informative prowess, which takes advantage of the full spectrum of digital resources, is practically non-existent. In the students' work analyzed, there is a total lack of understanding and application of aspects related to interactivity, hypertextuality, multimedia and cyber virtuality.

- Predominance of audiovisual elements: Resources of a visual and audiovisual nature, which are linked to the creative and aesthetic mindset of students, are seen as being the most valued, and used, attributes by the students themselves. This aspect is corroborated when analyzing the tools most used by students (Infogram, GoogleMaps and Thinglink) and the preeminence of YouTube as the social network with the greatest presence in the projects analyzed. The audiovisual competence of students is high; however, advanced or critical use of audiovisual material is not yet present in undergraduate students.
- **Proposals for reduced interaction:** Only 21% of the analyzed projects presented proposals which tried to be interactive with users. This aspect is also closely related to the limited use of hyper-textual stories on the part of students in their projects.
- Attention to self-produced materials: The significant presence (79%) of self-made content, as well as collaborative work among the students that developed the projects analyzed, is extremely valuable (Martín and Rodríguez, 2017). This is an aspect of great importance in the training of future journalists but is in stark contrast to the limited use of online tools and resources demonstrated in students' projects. Collaborative learning is key in creating highly complex transmedia work and is essential in educational methodology which has been validated by our study. Researchers firmly believe that collaborative learning is paramount at all levels of education, including at tertiary level.
- **Predominance of social networks:** Social networks clearly stand out in the set of proposals developed in our study. Among them, YouTube occupies pride of place, which clearly demonstrates the importance given to audiovisuals. However, the inclusion of these platforms, despite being quite broad, alerts us to them being seen as autonomous spaces which actually do not coordinate or combine well with the main web platforms used in students' projects (either directly or indirectly).
- Little attention to innovation: The existence of a small number of projects which stand out for their innovation (only 25% of the total) denotes the need to promote experimentation with new formats based on existing plat-

- forms and the logic of transmedia. Thus, creativity needs to be promoted in the degree of journalism as one of the competences for students to acquire.
- Recognition of transmission of values from journalistic storytelling: Students recognized ideological content in their projects through which social values can be transmitted to users of the created platforms. Despite the limited scope in real terms of the projects submitted by the students, the identification of the journalist's social role is significant as it connects with the construction of audiovisual critical thought which is associated with transmedia literacv.
- Instrumental competence versus limited criticical analysis: Our study allows us to conclude that students have an advanced technical mastery of digital tools. However, these technical skills do not quarantee quality journalistic use; nor do they quarantee their correct usage in terms of critical analysis. Therefore, the need to rethink pedagogical strategies (Martínez and Echeverría, 2009) and redesign tertiary curricula is indeed paramount. This restructuring of the degree in journalism would put greater emphasis on transmedia competences in an interdisciplinary way, while employing a wide variety of approaches. This is our proposal with the aim of promoting critical thinking for journalism students so that they can face the current challenges associated with the vast world of media.

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Notes

- [1] Horizon 2020: Program for Research and Innovation of the European Commission (contract no. 645238). Consult: https://transmedialiteracy.org
- [2] Project "New Media Literacies; learning in a participatory culture of the USC, Annenberg School of Communication and Journalism. Consult: http://www.newmedialiteracies.org
- [3] Consult the complete template at http://bit.ly/2nZB6WF
- [4] Consult: http://loteriesinadal.esy.es/
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