ARTICLE/ARTÍCULO

Dissemination on YouTube: Strengths and Weaknesses in the Field of Sociology

Divulgar en YouTube: fortalezas y debilidades en el campo de la sociología

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ABSTRACT

The aim of this study is to identify strengths and weaknesses to improve the dissemination of sociology. Content from two sources of information was therefore analysed: firstly, six sociology videos hosted on the digital platform YouTube, taking into account the format and type of message or messages they disseminate, the target audience, main speakers, comments and subscriptions, as well as image, sound and editing quality. Secondly, eight semi-structured interviews were conducted online with experts with different professional profiles and fields of activity, whose specialisation and experience prove particularly effective for improving dissemination strategies in the field of sociology. The results show the importance of the communication skills of those who appear in the videos to disseminate the sociological message, as well as the lack of specialisation for the dissemination of social sciences, in general, and sociology, in particular.

KEYWORDS: YouTube; sociology; dissemination; videos; interviews.

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RESUMEN

El objetivo de este trabajo es identificar fortalezas y debilidades para mejorar la divulgación de la sociología. Para ello, se realiza un análisis del contenido procedente de dos fuentes de información: por un lado, seis vídeos de sociología alojados en la plataforma digital You-Tube, atendiendo al formato y tipo de mensaje o mensajes que difunden, público objetivo, protagonistas, comentarios, suscripciones y calidad de las imágenes, sonido y edición; por otro lado, ocho entrevistas semiestructuradas realizadas *online* a personas expertas de diferentes perfiles profesionales y ámbitos de actuación, cuya especialización y experiencia resultan especialmente eficaces para mejorar las estrategias de divulgación en el campo de la sociología. Los resultados evidencian la importancia que tienen las habilidades de comunicación de quienes aparecen en los vídeos para difundir el mensaje sociológico y la falta de especialización para la divulgación de las ciencias sociales en general y de la sociología en particular.

PALABRAS CLAVE: YouTube; sociología; divulgación; vídeos; entrevistas.

1. Introduction

At present, the visibility of sociology remains low compared to other disciplines of pure science. Not only is this a pending task for sociology (and also for other social sciences), but even more so for a discipline in which, surprisingly, much of the communicative effort is made in specialised scientific environments and, therefore, is of a restricted nature (Navarro, 2019).

These are historic times in which there has been a generalisation of words such as "post-truth" ("posverdad", Gualda and Rúas, 2019), related to the sociological concept of ideology, indicating how, culturally speaking, the notion of objective truth is in crisis. Although it is true that strict objectivity is problematic, since there are always different points of view and nuances about social facts, this does not mean to say that all explanations of reality are equally plausible or that they explain the facts to the same extent. Despite the difficulties, social sciences aim to analyse social reality, taking into account the different points of view involved. In these times of "post-truth" or the questioning of science (as seen in several denier movements related to the pandemic, the social crisis as a result of climate change, gender-based violence, social inequality, genocide, etc.), it is now more necessary than ever to establish successful practices that improve the dissemination and understanding of scientific content in general.

Videos have become one of the most important channels for disseminating and consuming all kinds of information, increasing their potential due to the ease of sharing them on the internet via social media (Gértrudix et al., 2017). As Mayer (2005) points out, they enable content to be acquired effectively by combining visual and auditory information, in a unique presentation format. Muñoz et al. (2016, p. 1) define scientific dissemination videos on the internet as popular scientific audiovisual media that focus on communicating scientific content to a large audience.

According to the Digital 2022 Global Overview Report by the agencies We Are Social and Hootsuite, of the 4.95 billion internet users in 2021 (62.5% of the world

population), 91.9% watched video content. That same year, the average daily time that the 2.56 billion YouTube users spent on the digital platform was 47 minutes. In Spain, according to the latest available data, 31.5 million people used the platform each month in 2019 (72% of the total Spanish internet users), and it was the fourth most visited website and the most visited entertainment website (Vela, 2019). YouTube is one of the biggest sites on the internet for promotion and communication which, among other services, provides access channels and free maintenance, as well as acting as a social network that connects the user group (Zaragoza and Roca, 2020). Platform users can consume different products (video clips, conferences, monologues, tutorial videos, cultural critiques, entertainment, etc.), produce content and set up communication channels (Regner, 2021; Regalado, 2019).

Looking at IAB Spain's "Estudio Anual de Redes Sociales 2020" (Annual Social Network Study 2020), the cross-cutting nature that is characteristic of YouTube makes it one of the most used social networks by Generation Z and Millennials in Spain; it is among the five most popular social networks and, together with WhatsApp, is the most valued by the audience, as well as being the third social network on which users spend the most time. According to Bautista et al. (2019), this platform enables and expands the limits of conception of open science and facilitates the acquisition of the ability to apply scientific reasoning.

The potential of YouTube has presented a window of opportunity for academic institutions and scientific societies to host videos to both promote their educational and academic offer and communicate research results to a large audience. Despite the importance given to these strategies for communicating and transferring knowledge, in Spain there is a significant lack of research into their use by sociology and, consequently, there is little evidence to guide the effective use of videos to transmit sociological messages and to understand how to make better use of them for effective communication (Roislien et al., 2022). Some recent studies analyse the role of sociology in the media (Navarro et al., 2022), while others reflect on transfer activities during the professional career (Fernández and Espinosa, 2021). The former reveals a tenuous link between the media presence of sociology and study results or sociological reports, and when these are cited it is due to the initiative of the professionals involved in the medium, rather than that of journalists; that sociology is visible in the media, especially on questions related to politics and sociocultural or religious factors; and that the presence of male sociologists is far greater than that of their female counterparts. The latter reveals that transfer activities are conditioned by the professional career. Trainees must concentrate on building an academic professional reputation, where it is hard to assess transfer activities in evaluations and credentials. In more advanced stages of the profession, these activities are carried out to complement academic research. Generally, participation increases with the level of experience and professional category.

The aim of this study is to identify strengths and weaknesses to improve dissemination in the field of sociology using two sources of information: the content analysis, firstly, of six sociology videos hosted on the digital platform YouTube, and secondly, of eight

semi-structured interviews conducted online with experts with different professional profiles and areas of activity. The analytical contribution involves exploring channels through which sociological content reaches the audience to address the challenges of designing more efficient communication actions and encouraging a meeting point between the scientific community and the general public. Based on these analyses, it is possible to discuss the dynamics of communication more precisely and to obtain recommendations for people interested in the public communication of science. Furthermore, the method enables it to be replicated in other contexts and other branches of knowledge.

This article is divided into five sections. In the following section, based on the existing literature, the object of study is contextualised with references to scientific dissemination in general and to the use of videos in particular in a new online setting. The third section describes the methodology and data sources used. The fourth section presents the results obtained following the analysis of the six videos (4.1) and the eight interviews (4.2). Finally, the main findings and limitations of the data used are summarised.

2. Scientific Dissemination and the New Digital Media

Scientific dissemination is the process through which knowledge, findings or results of research are communicated to the general public, with the twofold objective of raising people's awareness and improving the visibility and recognition of the academic community and research centres (Instituto de Investigación en Recursos Cinegéticos, 2020). While spreading knowledge involves communicating findings to the scientific community, dissemination aims to bring the findings closer to anyone who wants to know about them. Citing Calvo (2006), dissemination comes about when the communication of a scientific fact is no longer exclusively reserved for members of the research community or minorities who control power, culture or the economy. By means of dissemination, accumulated resources can be returned to society in its broadest sense and, at the same time, interact with it (Harp and Mayer, 1998; Burns et al., 2003). Put more simply, there is no science without communication of science (San Martín, 2015, p. 118).

Although it is a hallmark, the first stage that all dissemination activity requires is adapting the complex terms and concepts to a simple, accessible language. That is, the action must not be embellished with more jargon or words than necessary, nor with long sentences, nor devices that make it obscure or unintelligible (Simón, 2018, p. 9). If it shines, or so that it shines, let it be for its innovative content and, if possible, let it be the latter that makes it pleasing (Belenguer, 2003; Calvo, 2006; Quiñónez, 2011). Scientific dissemination requires a second adaptation process that involves deciding which format to use to share the content, as doing so in the media is not the same as in informative videos, on social networks or at educational events and science fairs.

Prior to the SARS-CoV-2 coronavirus pandemic, science had never been more prolific nor more high-profile on social networks. The pandemic not only changed science, but also how we share it. In the space of months, the number of people who informed

about the pandemic rocketed on WhatsApp, blogs, Twitter and YouTube (Plaza, 2021). As noted by Miró and Gómez (2020), one of the positive outcomes of the pandemic is the opportunity to understand the importance of science developing and circulating and of its impact and understanding reaching as many people as possible.

The media have not been oblivious to this trend and, nowadays, scientific journalism occupies a prominent place (López, 2020). Something similar has happened on the academic side: the vision that was dominant a decade ago with academics disinterested in dissemination, guided by not receiving anything in return in curricular terms, has turned 180 degrees to be associated with those who do take an interest in it (Donovan, 2008; Flecha and Soler, 2014). As noted by Navarro (2019), if the dissemination of science is fashionable it is because, in the majority of the calls that finance research projects, dissemination actions to generate social impact now count, and significantly so. Flecha (2018, p. 485) is more explicit on highlighting how, in the European Research Framework Programmes, researchers have to predict the social impact right from the drafting of their projects.

The proliferation of blogs, YouTube videos and topic accounts on social media has meant that scientific knowledge can be promoted in a more accessible and engaging format to the general population (Cárdenas, 2017). Knowledge has gone from being confined in physical spaces to being open online, examined and rated by the users. It is freer, but less controlled, and therefore much more exposed to manipulation, generating "noise" and misinformation (Plaza, 2021). Today, the dissemination of science faces this duality: one needs to know how to deal with these dynamics on platforms that are saturated with information—and misinformation—and, at the same time, take advantage of the new digital culture to connect with the public through innovative narratives on social networks (Montero and Mora, 2020).

The scope of numerous research projects is focused on the creation of scientific content on YouTube and the relationship between YouTubers and their audience (Zaragoza and Roca, 2020). Castillo (2016) claims that this platform is the start of a new way of accessing and visualising audiovisual content, while Vizcaíno et al. (2020) assert that it is a disclosure platform for the communication of knowledge underpinned by the freedom to learn and teach science. Erviti and León (2014) observe that science videos occupy an important place: they are the second most popular YouTube content worldwide, only second to entertainment videos. Muñoz et al. (2016), on the other hand, identify a wide variety of genres and sub-genres within scientific dissemination videos, with production being moderately complex and the montage and narration being highly complex, which points to growing professionalism in the production of science videos on the internet. In this vein, Mena (2022) highlights the need to broaden the topics and knowledge areas in audiovisual production and include more narrative resources and gender parity. Arab and Díaz (2015) consider that, despite there being certain distrust of the YouTube platform, the message is effective for transmitting content in a comprehensible way and favouring more and better scientific dissemination.

The study by Zaragoza and Roca (2020) identifies the profile of YouTuber scientific disseminators as young males who have completed higher education, who use animations and their personal image as two more effective communication tools.

They conclude that, despite there being more channels dedicated to natural and exact sciences than human and social sciences, the topic does not determine the informative effect on the audience; rather the correct use of image and communicative methods predominates. This coincides with the point made by Navarro, Ortega and Fernández (2022), which is that the way in which sociology reaches the public is conditioned by the participants, channels and practices that exist around the different mediums.

In sum, as can be derived from the above, the use of videos hosted on digital platforms such as YouTube is an innovative strategy to disseminate science, in general, and sociology, in particular, in a new online setting. By means of images, testimonies, music, dynamic infographics with statistical data, interactive thematic atlases and word or tag clouds (Dávila, 2004; Guilló, 2019; Criado, 2020), new digital means make up a highly useful tool for communicating sociological messages and, therefore, for improving the democratic process, under the assumption that sociology must be applied in providing a practical knowledge base from which people understand the world in society (Navarro, 2019; Barbeito, 2019). As noted by Gil (2019, p. 144), scientists must be held doubly accountable for their studies; firstly, to their professional colleagues and other specialist collectives, just like other scientific researchers, and secondly, to the people themselves, as their object of study is the social reality to which they belong and in which they are involved. The fact that there are best-sellers on social issues shows the population's marked interest, which social sciences can take advantage of to connect with the general public. Thus, Cárdenas (2017) recognises that content created and promoted on social media must not be seen as a risk, but rather as an opportunity to research and build knowledge networks.

3. Data and Methodology

This exploratory and qualitative study analyses data from two information sources: first, six sociology videos hosted on the digital platform YouTube and second, eight semi-structured interviews conducted online with experts with different professional profiles and areas of activity. YouTube was used because it is a free, public platform and the second most visited website worldwide (López, 2021).

In total, eighty videos with sociological content were watched between the months of March and December 2021. Finally, as detailed in Table 1, six were selected for the analysis, identifying three typologies: 1) academic videos directed at students; 2) academic videos directed at the general public (in both cases, promoted and produced from or by academic institutions and/or scientific associations related to sociology); and 3) non-academic videos (independently promoted and produced by sociology professionals). The two videos with the highest number of views were chosen for each typology¹. As shown in Table 2, of the experts interviewed, one is from a company that specialises in communication of science, three are from public and private research companies, and another four are from universities. The interviews were conducted online in 2021 and 2022 and lasted an average of 45 minutes².

https://www.youtube.com/ watch?v=_XYrVxlpcbU

Table 1Profile of the six YouTube sociology videos chosen

Classifi- cation	Producer	No. views (as of 17/02/2023)	Description of the content	Duration (mins)	Date	Link and screenshot			
ID: V1 Tit	ID: V1 Title: ¿Qué es la sociología? (What is sociology?)								
Aca- demic, directed at stu- dents	Pontificia Universidad Católica del Perú (Pontifical Catholic University of Peru, PUCP)	714,261	Professor Manky questions the meaning of sociology based on certain prejudices of the students in his classes.	32:02	08/06/2012	January Potri Matthews://www.youtube.com/ waichey=P4N_PZ98ETc			
ID: V2 Ti	ID: V2 Title: Sociología es (Sociology is)								
Aca- demic, directed at stu- dents	University of Alicante (UA)	19,657	Made for the 25th anniversary of the degree in Sociology at the University of Alicante, different testimonies of students and professors state what sociology is and mention the subjects taught.	01:29	11/01/2016	https://www.youtube.com/ watchev=343igW41b3A			
ID: V3 Title: Introducción a la sociología (Introduction to sociology)									
Aca- demic, directed at the general public	Open University of Catalonia (UOC)	131,068	Professor Estradé i Saltó questions the meaning of intellectual curiosity as a requirement for raising awareness of the social world and the emergence of sociology.	14:14	09/03/2016	https://www.youtube.com/watchev=O22HFpsizkw			
ID: V4 Title: La sociología en marcha (Sociology in action)									
Aca- demic, directed at the general public	Professional Asso- ciation of Political Science, Sociol- ogy, International Relations and Public Administration. Spanish Federation of Sociology.	95,741	By means of illustrations and with background music, a voice-over narrates the meaning of sociology and how it conditions and affects people's lives.	05:29	25/09/2018	U MODIZIÓ RIGITA. Por será suprima sup			
ID: V5 Title: ¿Qué es la sociología? En minutos (What is sociology? In minutes)									
Non-ac- ademic	En Minutos	272,108	It illustrates, accompa- nied by a voice-over, the meaning of sociology and briefly summarises the history and emer- gence of the discipline.	04:41	22/06/2020	Attis 2000 300 Amana https://www.youtube.com/ watchev=h3hTG Thmuo			
ID: V6 Ti	ID: V6 Title: ¿Qué es la sociología? En menos de 5 minutos (What is sociology? In less than 5 minutes)								
Non-ac- ademic	Anteojos sociológicos	122,762	Sociologist Belén Meneses describes what sociology is and presents some classic currents and authors.	04:21	26/01/2020	Canada a Sala.			

Source: Own research.

Table 2 Profiles of experts interviewed

Name	Profile				
Óscar Huertas Rosales	Founder of the company Laniakea Management & Communication, which specialises in the management of scientific dissemination and the organisation of events related to the communication of science.				
Roberto Luciano Barbeito Iglesias	Sociologist, political scientist and lecturer at Rey Juan Carlos University. Executive secretary of the Spanish Federation of Sociology (FES, by its initials in Spanish) and the Political Sociology Research Committee.				
Ángel Ramírez Troyano	Sociologist and political scientist. Research technician and scientific dissemination manager at the Spanish Institute of Advanced Social Studies (IESA-CSIC, by its initials in Spanish).				
Marcos Terradillos Bernal	Director of the Master's Programme in Scientific Dissemination at University Isabel I, Spain. Member of the Atapuerca Research Team (ART), an international pioneering project in the field of scientific dissemination.				
Isabel López Calderón	Lecturer on Genetics at the University of Seville. She has extensive experience researching and promoting at conferences, congresses, etc.				
Ignacio López Goñi	Professor of Microbiology and director of the Science Museum at the University of Navarra. He promotes dissemination activities in all kinds of formats and to all different audiences.				
José Antonio López Guerrero	Lecturer on Microbiology at the Autonomous University of Madrid and Director of the Department of Scientific Culture at the Severo Ochoa Molecular Biology Centre (UAM-CSIC). Awarded, together with Ignacio López Goñi, the CSIC-Fundación BBVA Prize for Scientific Communication (2021) in the category of researchers who contribute to the dissemination of knowledge to society.				
Silvia Leal Martín	Sociologist and advisor to the European Commission. For three consecutive years, she has been recognised by Mujeres&Cia as one of the ten most influential experts in Spain for her work in the field of e-leadership and innovative energy (training, articles, interviews, conferences, etc.). Director of Technology and Innovation Programmes at the IE Business School.				

Source: Own research.

4. Results

This section presents the results obtained following the analysis of the six sociology videos hosted on the digital platform YouTube (Sub-section 4.1.) and the eight interviews with experts (Sub-section 4.2.). These results enable the potential and weaknesses of the dissemination of sociology to be explored, with particular focus on the format of the video, the quality of the images and sound, the type of message or messages, the communication skills of the main speakers, and the number of likes, subscriptions and comments.

4.1. Sociology videos hosted on YouTube

4.1.1. Quality and resolution

The quality and resolution of the six videos analysed is high, except for one video which is not filmed or exported in HD and whose visual style is not sophisticated (*What is sociology?*, V1). It appears to have been filmed using non-professional cameras, like in the video *What is sociology? In less than 5 minutes* (V6).

In general, the sound intensity is appropriate, except in the video *Introduction to sociology* (V3), in which dubbing in Spanish is superimposed over the original audio

(Catalan) which, at times, makes it difficult to stay focused and follow the narrative thread. It is only in this video that general views are taken and that the characters are in motion. Two academic videos directed at students take place in classrooms (*What is sociology?*, V1, and *Sociology is...*, V2), while the academic video directed at the general public takes place in a library (*Introduction to sociology*, V3).

Five videos include references to sociologists (Marx, Durkheim, Weber and Comte are named in several, Giddens in one). All those cited are male, without taking into account, therefore, the contribution of women. Except for the video *Sociology in action* (V4), by the Professional Association of Political Science, Sociology, International Relations and Public Administration and the Spanish Federation of Sociology, the rest use the generic masculine form, without alluding to inclusive language. Except for the video *Sociology is...* (V2) by the University of Alicante directed at students, which is flatter, the rest have a narrative structure, with an introduction, climax and ending.

The content of the six videos analysed reveals the interest in using comprehensible language and being concise in order to make sociology known as a science and profession and its contribution to society. The two academic videos directed at students place the focus on teaching and on the subjects taught (*What is sociology?*, V1, by the Pontifical Catholic University of Peru and *Sociology is...*, V2, by the University of Alicante).

4.1.2. Format

Sophisticated formats predominate, with cuts and scene changes. The resources used that give sense, rhythm and meaning to the speech are mainly images, videos and text that are superimposed on the screen.

Two videos stand out in which people do not appear, that is, they are animated videos: Sociology in action (V4) and What is sociology? In minutes (V5). Ten people appear in Sociology is... (V2): sociology graduates, professors and students. In the four videos with main speakers, the communication and expressive skills of the speakers stand out, using their body language to transmit information. Of these, the following are of note: What is sociology? (V1), in which Professor Omar Manky talks about prejudices, and What is sociology? In less than 5 minutes (V6), in which Belén Meneses, a young sociologist, explains the meaning of sociology with references to classic authors. The videos are usually filmed with a medium shot, framing the subject from the head to the waist.

Only two of the six videos analysed, *Sociology in action* (V4) and *What is sociology? In minutes* (V5), have subtitles, and therefore the other videos do not ensure that their content is accessible to those with hearing impairments. None of the six videos are available in other languages, nor do they have foreign language subtitles.

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As per the audiovisual material and the format, the three videos with the best production and editing quality are *Sociology is...* (V2), *Sociology in action* (V4) and *What is sociology? In minutes* (V5). All the videos are hosted on YouTube channels that were created between two (*What is sociology? In minutes*, V5) and fifteen years ago (*What is sociology?*, V1), sharing space with other content related to the institution, teaching, undergraduate degrees and master's programmes, conferences, etc.

There is a range of durations depending on the style of video. The four short videos are between 1 and 5 minutes long, while the longest have the format of an online class (*What is sociology?*, V1) and documentary format (*Introduction to sociology*, V3), lasting 32 and 14 minutes, respectively.

In five videos the pace of the speech is appropriate, with silences as a reflective pause. The pauses tend to coincide with the change of speaker and scene. The video *What is sociology? In less than 5 minutes* (V6) is fast and energetic, which may be positive for a young audience, but negative for older people.

4.1.4. Social impact

The six YouTube videos analysed have a high social impact according to the number of views. The academic video *Introduction to sociology* (V3) stands out, created by the UOC in 2016 and directed at the general public, with 679,000 views. This is followed by the most recent video, from 2020, with 169,230 views: the non-academic video *What is sociology? In minutes* (V5). The rest have more than 80,000 views, except for one which has 19,100 (*Sociology is...*, V2, by the UA). The number of views is more or less proportional to the number of subscribers; for example, the video with the most views has 270,000 subscribers. There are, however, two exceptions. The video with the fourth-most views (81,288) has 842 subscribers (*Sociology in action*, V4), while the aforementioned academic video by the UA, *Sociology is...* (V2), directed at students, surprisingly, has more subscribers (21,400) than views (19,000).

To delve further into the impact of the videos, an indicator was developed based on the division of the number of views and the number of likes on YouTube to find out how many of the people who watched the video liked it. According to this indicator, the videos with the biggest impact are the two non-academic videos, made independently by sociology professionals: What is sociology? In less than 5 minutes (V6) and What is sociology? In minutes (V5), liked by 1 in every 26 and 47 people, respectively. The communication skills and the fast and energetic pace of a young girl speaking about sociology in the first video and the originality of the format in the second video, showing a hand writing the content, seem to be liked by the audience and, therefore, they are strategies that may work for communicating sociological messages. They are, by far, the two videos with the most positive comments (compliments, thanks, etc.) on the YouTube channel, emphasising, in particular, the way in which the content is transmitted. This is demonstrated by comments such as:

"If there were more professors with this skill to teach sociology, understanding it would not be so tedious. It really is a good explanation, many thanks"; "I love your energy when you communicate, you make it entertaining and enjoyable", "Thanks for your great contribution, believe me when I say it is really appreciated because you can see that many hours of work have gone into these 5 minutes". In the third video with the greatest impact (liked by 1 in every 76 people who have watched it), Professor Manky (main speaker) displays great expressive and communication skills. His relaxed tone of voice invites the viewers to keep paying attention. It is the academic video What is sociology?, directed at students and made by the Pontifical Catholic University of Peru. Continuing with this indicator, the video with the least impact is Sociology is... (V2) (liked by 1 in every 79 people who have watched it), made for the 25th anniversary of the degree in Sociology at the University of Alicante. This video differs from the rest in its length (it barely lasts a minute), for being the video in which most people speak (ten people, with short contributions) and is the only video which is a flat communication model that does not attract interest or hold the audience's attention.

The comments are generally positive. The format of the video is particularly valued, either to make sociology visible and known or to encourage interest in studying a degree in Sociology.

4.2. Experts interviewed

4.2.1. Strategies to improve dissemination

The eight interviewees agree that dissemination involves transmitting scientific information in an accessible way to different audiences without twisting the meaning, relevance or veracity. It is the most complex level of the communication of science, as it requires the technical language to be simplified and translated to make it more accessible. It entails effectiveness and responsibility on the part of the presenter. The main objective is to increase scientific culture among the general public, making them part of scientific advances, of socialising and of making a community. The main problems are the limited professionalisation and not measuring the impact of the actions that are carried out. As Silvia Leal, Director of Technology and Innovation Programmes at the IE Business School points out, being a good scientist does not imply being a good disseminator, nor a good disseminator a good scientist. In relation to the second issue, Óscar Huertas, from Laniakea Management & Communication, comments that the impact is not measured, therefore activities may be carried out that are useless; if it does not have an impact and it goes unnoticed, it should not count. In particular, he believes that research into scientific dissemination must be reinforced, to find out what works and what does not in scientific communication.

Roberto Barbeito, lecturer in Sociology and Political Sciences at the Rey Juan Carlos University, points to bureaucratic questions and lack of recognition as bottlenecks for the involvement in dissemination actions, highlighting how academic life has become very demanding in bureaucratic and transparency

procedures (credentials, justifications, reviews, etc.) that prevent academics from having the necessary time. He adds how there is no incentive structure for dissemination, unlike in other tasks such as publishing, which is highly valued. Therefore, he points out that as there are so few professional opportunities, it is considered secondary, a drain on effort, resources and time, and those who do take part in dissemination actions do so out of vocation. Marcos Terradillos (Director of the Master's Programme in Scientific Dissemination at University Isabel I) and Silvia Leal highlight how the majority of academic dissemination activities carried out in Spain are as a result of voluntarism and are unpaid. Thus, one of the strategies to improve dissemination that is mentioned frequently in the interviews is professionalising it.

This is the golden age of dissemination; there are multiple channels and media through which society can be reached and which open up new channels of communication, much needed by the interviewees. As Roberto Barbeito points out, it is not a problem of the channel, but rather of adjusting the audiences and the content and the way of conveying these concepts.

All research has to be disseminated, but it does not have to be directly done by the person responsible or someone from the team. Óscar Huertas points out that any format is interesting provided that it is done well. He also goes on to summarise the current state of dissemination on social media, stating that there are true 'rockstars' of dissemination and that people consume their content simply because it is theirs; there is other content that is of the same or better quality but it is not consumed because it is not popular. Furthermore, to be able to dedicate yourself to this and be influential in the digital sphere, you need to be very engaged; in professor Barbeito's opinion, you only have to look at Instagrammers and YouTubers to see how they have to dedicate themselves to it entirely. Silvia Leal, on the other hand, expresses how everything adds up, and those little YouTube videos that go viral because they have a lot of ingenuity behind them; they are wonderful. She adds that important messages must be drip-fed, with the messages being heard in many places until they resonate and that is how interest is generated.

The eight interviewees agree about the need to have more incentives and resources to improve scientific dissemination strategies. Isabel López, from the University of Seville, concludes that awareness about dissemination needs to be created, and that everyone needs to be seriously involved. Roberto Barbeito (URJC), Ángel Ramírez (IESA-CSIC) and Ignacio López (University of Navarra) agree that there needs to be an objective set by public authorities, facilitating the means, curbing the dominance of visibility management on some platforms and, in turn, establishing new ways of generalised access. There is a need for greater support and recognition of research, to allow time for quality content to be published and to demand a more active way of transmitting research results or processes. As an indispensable condition, they propose changes in the evaluation and academic accreditation criteria so that dissemination and knowledge transfer actions are taken into account.

5. Conclusions and Final Thoughts

This work has offered information that was not available until now on dissemination in the field of sociology. It has made it possible to show how new knowledge is built in this field using theoretical and methodological tools. This was done using two analysis strategies with the objective of identifying factors that facilitate and hinder successful scientific dissemination of sociology. The first was the analysis of six videos hosted on the digital platform YouTube, due to it being a format that is increasingly used to disseminate science according to existing studies. The second was the analysis of eight interviews conducted online in 2021 and 2022 with key informants from private communication companies, public and private research centres and academic profiles with significant experience and recognition for their dissemination actions. The profile and justification for the selection of the videos and the profile of the interviewees is presented in Tables 1 and 2, and a link has been provided so that the reports and complete recordings of the interviews can be consulted. Table 3 of the Annex presents the dimensions, sub-dimensions and indicators designed to analyse the content of the videos. Thus, sufficient detail is provided with the possibility that the results obtained can be contrasted following the same procedure and, therefore, provide the opportunity to replicate the work in other contexts and disciplines.

Scientific dissemination has gained importance as an intermediary between the great advances in research and the public, while more tools, more receivers and, therefore, more requirements to adapt the message to the target audience have also appeared. In the area of sociology, the concern for understanding, analysing and publicly proposing solutions to social problems (Moreno, 2014) is not new, but it is current. The so-called public sociology interested in private concerns becoming matters of public interest had special visibility as a subject of disciplinary attention in 2004, as a result of the speech by Michel Burawoy as President of the American Sociological Association (Burawoy cited in Fernández, 2006). According to García (2021, p. 3), one of the concerns of Harriet Martineau (1802–1876), a first-generation sociologist, was that her ideas, and also those of others and scientific works in general, were close and accessible to the general public.

Videos are one of the tools that scientists have to carry out this task successfully. Digital platforms such as YouTube, widely used today as has been shown, are a means to access, spotlight and communicate sociological knowledge to the general public. The results obtained point in this direction if the public presence of sociology is to be improved, recommending the need to be present with quality videos, doing so continuously and in an up-to-date manner and using communication tools that respect the principles of universal accessibility. The positive effect of the main speakers' communication skills and the use of innovative narratives in disseminating sociological messages through videos has been evidenced. Thus, creating a genuinely audiovisual product must be considered a basic element of the language of communication and as such, to be expressed correctly, in the same way as other arts such as painting or writing, knowledge of norms and standards

is required, such as the importance of drafting a graphic script of the content as a starting point, creating a story (introduction, climax and ending) for communicating ideas, and using infographics when using magnitudes. Javier Sampedro, today a renowned scientific journalist, mentions how all researchers understand their object of study, but very few know how to explain it clearly to the audience, stating how disseminating involves converting a dense concept into a digestible, attractive and pleasant text (Sampedro, 2018, p. 88).

However, transferring knowledge to non-specialist audiences creates a series of challenges in the field of sociology. First, the discipline has some cognitive features that act as a barrier (Estruch, 2003; Lahire, 2006; Castillo, 2016). The complexity of some research projects and the specialised language make it difficult for people to understand. In addition to this, there is another obstacle that complicates public communication: the risks of simplification caused by the need for expressive simplicity in a short space of time that our developed society increasingly demands (Ovejero, 2012; Barbeito, 2019; Hartmut, 2019).

The sources used in this study have certain limitations. Although the YouTube videos analysed enable the identification of dynamics of interest for improving dissemination in the field of sociology, broadening the search to other highly used digital platforms such as VIMEO and Twitch would also be very interesting (IAB Spain, 2020). The spatial and temporal limitation of the search must also be noted. As it is a dynamic consumption and production site, there may be variations in the results depending on the website and the date on which the search is made. The algorithm on YouTube makes some videos stand out and be viewed more than others, whose relevance criteria are not public. Therefore, as other studies suggest, it would be interesting to monitor the protocol of analysis used to detect variations in the positions and in the results themselves and compare them—every so often—to obtain a denser results matrix (Macho and Bermúdez, 2020). Although social networks and new digital platforms occupy an increasingly greater space in the use and consumption of audiovisual media, there are still other channels for scientific dissemination, with different and varied characteristics, and with great capacity for social reach. As this study is an addition to the line of research on dissemination in the field of sociology, it is interesting to delve into the knowledge of social networks, consulting reference works in repositories and databases specialised in communication.

Within the qualitative approach, although the profiles of the people selected are varied, solvent and eloquent in their areas of work, there are others to be considered to continue examining the area of dissemination, for example, university communication offices, journalists specialised in science from different media and digital platforms (press, radio, podcasts, etc.) and those true 'rockstars' of dissemination mentioned by the interviewee Óscar Huertas, from Laniakea Management & Communication.

In sum, the dissemination of sociological research is a highly relevant topic for the discipline, but it has not been sufficiently addressed. It affects substantive issues, related to the problem of reflexivity, both internal and external. Like all science, sociology is in constant evolution, expanding and even self-correcting, which is one

of its great virtues. Thus, it is necessary to update the tasks, tools and the methods of disseminating. Consequently, the research whose results are presented in this article provides new suggestive, original and useful knowledge to accumulate and contrast data in a line of research in crescendo such as the one presented here. It offers the possibility of developing different roadmaps with the objective of describing the current status of dissemination in the field of sociology. This is the first step for designing improved strategies that not only allow students and the scientific community to deepen their knowledge of this discipline, but also to bring it closer to the public, making them aware of its use for understanding complex phenomena and resolving problems that affect their daily life. It is a major challenge, but it is very fascinating.

6. References

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7. Annex

Table 3Dimensions, sub-dimensions and indicators of the content analysis of the six videos hosted on the digital platform YouTube

Dimensions	Sub- dimensions	Indicators	Source
1. Quality and resolu- tion	Images	Resolution → High if exported in HD (High Definition) Expressive richness and aesthetic innovation (visual style) Design and use of scenery Light intensity	Own research based on Gértrudix et al. (2017) and Ferrés (2007).
	Sound	Sound intensity Pace and pauses Use of music that reinforces the text	Own research based on Gértrudix et al. (2017).
	Content	Information → No. of topics and sub-topics Relevance to the field of sociology Narrative elaboration Entertaining/animated Vocabulary Language → Inclusive (not sexist) Type of dialogue established with the users → Didactic, instructional, etc. Title	Own research based on Gértrudix et al. (2017), Freixa (2020), Ferrés (2007) and Antón and Guallar (2014).
2. Format	Characters/ Narrators	No. main speakers and co-stars Physically appearing on scene Gender of main speakers Shot of characters → Full, medium, close-up Narrative roles Communication skills Attitude/action	Own research.
	Visual content materials	Images, videos, infographics, etc.	Own research.
	Editing	Level of editing Gives sense, rhythm and meaning Subtitles (audiovisual accessibility) Subtitles in other languages	Own research based on Gértrudix et al. (2017).
	Corporate involvement	Use of corporate elements (logo, images, etc. of the institution)	Own research based on Gértrudix et al. (2017).
3. Production	Own channel for promotion The channel has more videos – If yes, whether they are specialise in sociology Academic or non-academic Level of education → Professionals or enthusiasts		Own research based on Paz and Hernández (2017).
4. Duration	Video	Duration → Short if it is less than 5 minutes	Own research based on Gértrudix et al. (2017).
	Music	Frequency of appearance	Own research.
	Contributions by speakers	Frequency of appearance	Own research.
5. Speed	Contributions	Pace and pauses	Own research.
6. Social impact	Engagement	Number of views Number of likes Number of views / Number of likes	Own research based on Llonch (2019).
	Comments	Number Type and sense (positive or negative) Reply or like	Own research based on Vizcaíno et al. (2020).
	Subscriptions	Number	Own research.
7. Objective(s)	Target audi- ence	General public, specific public (professionals or students)	Own research.
	Message(s)	Topics Effectiveness for transmitting	Own research.

Notes

- Table 3 showing the dimensions, sub-dimensions and indicators designed for the content analysis of the six videos is included in the Annex. To consult the analysis of each, visit the following link: https://drive.google.com/file/d/1clNjF_YeNJ32fdw0gABxKfP8dG8L11xU/view
- 2 The complete recordings and the reports of the interviews in Spanish can be consulted at the following link: https://drive.google.com/file/d/1Kb33I5dWXUcVTNDA6LQoOWiyhn1HV3_L/view?usp=sharing