

Giving AI a Body: Representations of Social Robots in Latin American Media

Iliana Ferrer ¹ , Leonor Balbuena ² , Oscar Mario Miranda-Villanueva ³ ,
and Mathias-Felipe de-Lima-Santos ^{4,5,6} 

¹ Department of Audiovisual Communication and Advertising, Universitat Autònoma de Barcelona, Spain

² Department of Advertising, Public Relations and Audiovisual Communication, Universitat Autònoma de Barcelona, Spain

³ School of Humanities and Education, Tecnológico de Monterrey – Campus Estado de México, Mexico

⁴ School of Communication and Arts, Nebrija University, Spain

⁵ School of the Arts and Media, University of New South Wales (UNSW), Australia

⁶ Digital Media and Society Observatory (DMSO), Federal University of São Paulo, Brazil

Correspondence: Iliana Ferrer (iliana.ferrer@uab.cat)

Submitted: 15 April 2026 **Accepted:** 22 July 2026 **Published:** 10 September 2026

Issue: This article is part of the issue “AI Use in Marginalized Media Markets” edited by Bruce Mutsvairo (Utrecht University) and Mathias-Felipe de-Lima-Santos (University of New South Wales / Federal University of São Paulo), fully open access at <https://doi.org/10.17645/mac.i503>

Abstract

Social robots (physically embodied systems designed to interact with humans through social behaviours) have gained increasing visibility in news media. However, their everyday presence in Latin America remains limited, reflecting broader asymmetries in technological diffusion across non-WEIRD contexts. This study examines how social robots are represented in Latin American news media and how artificial intelligence (AI) is communicated through embodied technologies. A quantitative content analysis was conducted on a corpus of 404 news articles published in Spanish and Portuguese language media, retrieved through Google’s search engine. The study employs an LLM-assisted coding procedure combining automated classification with human validation. The analysis focuses on three dimensions: journalistic treatment (narrative frames and evaluative tone), representation of AI (attributed agency and explicit references to AI), and social functions (social roles, sectors of application, and sources). The findings show that coverage is predominantly framed around care and assistance, with positive or ambivalent evaluations, while conflict-oriented frames remain marginal. Social robots are mainly portrayed as assistants or caregivers, described as semiautonomous systems, and situated in healthcare and research contexts. Coverage relies largely on corporate and scientific sources, with a limited presence of civic or governmental voices. These representations position social robots as a key interface through which AI becomes publicly interpretable. The study contributes to research on AI and journalism in non-WEIRD contexts by showing how media representations shape understanding of emerging technologies in the absence of widespread direct experience.

Keywords

AI; artificial intelligence; computational journalism; journalism studies; Latin American media; media representation; news coverage; social robots

1. Introduction

Artificial intelligence (AI) has become a relevant topic in contemporary public debate, yet how people encounter AI varies significantly across global contexts. In highly technologized environments, citizens increasingly interact directly with AI-driven systems through everyday applications such as recommendation algorithms, voice assistants, or generative platforms (Neudert et al., 2020; Nguyen & Hekman, 2024). In many regions of the Global South, however, direct interaction with advanced AI technologies remains limited (de-Lima-Santos & Ceron, 2022; Soto-Sanfiel et al., 2022). In these contexts, journalism acts as a mediator, as news media often constitute one of the primary points of contact through which societies encounter and interpret science and technology (Schäfer, 2017).

Within this mediated landscape, social robots occupy a particularly salient position. Defined as physically embodied systems designed to interact with humans through communicative behaviours such as speech, gaze, and movement (Aymerich-Franch & Ferrer, 2020; Hegel et al., 2009; Salvini et al., 2010), social robots provide a visible and narratable interface through which AI becomes tangible. Thus, AI, automation, and social robots represent distinct levels of capability, and the differences between them are worth spelling out clearly. Automation relies on rigid, predefined rules to perform repetitive tasks with little or no adaptive decision-making (de-Lima-Santos & Salaverría, 2021). AI uses advanced computational systems capable of learning, reasoning, and adapting to new data or environments (de-Lima-Santos & Ceron, 2022). Social robots may integrate technologies, from advanced to simple ones, to interact and communicate with humans while adhering to social behaviours and cues (Aymerich-Franch & Ferrer, 2022; Ferrer & Aymerich-Franch, 2026). Consequently, not all social robots rely on advanced AI; many operate through pre-programmed behaviours, rule-based control or simpler forms of automation.

Nevertheless, media discourse frequently presents social robots as AI-driven technologies, often attributing capabilities that exceed their actual technical properties (Riemer & Wischniewski, 2019; Savela et al., 2021). Unlike algorithmic systems that operate invisibly in the background, the embodied nature of social robots translates abstract computational processes into socially meaningful categories such as care, work, emotion, and agency, thereby making AI socially interpretable. This embodied visibility facilitates journalistic storytelling by making complex technological processes more accessible to wider audiences.

Despite their growing visibility in media discourse, the real-world deployment of social robots remains unevenly distributed. Their applications in customer service, education, and healthcare have been documented in various scenarios (Aymerich-Franch & Ferrer, 2020, 2023; Belpaeme et al., 2018; Belpaeme & Tanaka, 2021; Ferrer & Aymerich-Franch, 2026; Mubin et al., 2013), and their use expanded during the Covid-19 pandemic in roles related to liaison, safeguarding, and well-being (Aymerich-Franch & Ferrer, 2022). Such deployments are concentrated primarily in highly technologized regions, i.e., predominantly in Western contexts.

This asymmetry has important communicative implications. In non-Western, non-educated, non-industrialized, non-rich, and non-democratic (non-WEIRD) contexts, particularly in many regions of the Global South, where direct interaction with embodied AI systems is scarce (de-Lima-Santos & Jamil, 2024), knowledge about these technologies is largely mediated rather than experiential. Audiences are therefore more likely to encounter social robots through journalistic narratives that describe their capabilities, risks, and potential societal roles than through direct use.

Existing scholarship on AI and journalism has predominantly focused on newsroom automation, algorithmic production, and the professional implications of AI adoption within media organizations (de-Lima-Santos & Ceron, 2022; Moran & Shaikh, 2022). Far less attention has been paid to how journalism represents embodied AI technologies such as social robots in societies where these systems are not yet widely embedded in everyday life.

Against this background, this article examines how social robots are represented in Latin American news media. Specifically, it analyses the narrative frames, attributed roles and levels of agency, and evaluative orientations through which social robots are constructed in journalistic discourse. By doing so, the study explores how these representations contribute to making AI intelligible in a context of limited technological adoption. This article contributes to research on AI in non-WEIRD contexts by shifting attention from technological adoption to mediated representation, elucidating public understanding, expectations, and the potential risks for AI integration in such contexts.

2. Theoretical Framework

2.1. AI, Robotics, and Media Representation

Technological innovations often generate both optimistic and pessimistic expectations. To translate these complex scientific and technological developments for general audiences, news media serve as a primary interface explaining and contextualizing these innovations (Dwyer et al., 2023). Journalists translate specialized knowledge into accessible narratives using descriptive language, images, audiovisual materials, and explanatory framing.

The representation of AI in the news has been extensively studied in certain areas. Prior research has examined AI coverage in countries, such as Denmark (Scott Hansen, 2022), the Netherlands (Vergeer, 2020), the United States (Chuan et al., 2019; Cools et al., 2024), France and English-speaking media systems (Duberry & Hamidi, 2021), Turkey (Sarisakaloğlu, 2021), as well as coverage of generative AI (GenAI) technologies such as ChatGPT (Gómez-Calderón & Ceballos, 2024) and the use of AI tools within newsrooms (Moran & Shaikh, 2022).

Research specifically addressing robotics in the news remains comparatively less developed, and even fewer studies focus on social robots. Existing work has examined robot narratives in relation to disability and labour (Wolbring, 2016), healthcare robotics representation (Solberg & Kirchhoff, 2024), opinions about robots in working areas (Riemer & Wischniewski, 2019), and explanatory journalism coverage (Dwyer et al., 2023). Comparative research has also explored differences in framing between Western and Eastern newspapers (De Boer et al., 2021).

In the case of social robots, media representations are particularly important because they help audiences build mental models of technologies with which they have no direct experience (Savela et al., 2021; Stein, 2023). Studies have shown that people frequently obtain information about robots from secondary sources such as news coverage (Riemer & Wischniewski, 2019), suggesting that journalistic discourse shapes expectations, attitudes, and behavioural intentions.

Media portrayals of social robots can evoke enthusiasm, curiosity, and technological optimism, but also concerns about job displacement, ethical risks, and broader social implications (Nguyen & Hekman, 2022; Riemer & Wischniewski, 2019). Previous research indicates that perceptions of robots are influenced not only by personal experience but also by mediated and fictional representations (Horstmann & Krämer, 2019), which may also influence trajectories of technological development and adoption (Chuan et al., 2019; Garvey & Maskal, 2020). These dynamics are particularly salient in the case of social robots because their embodied form invites interpretations grounded in human-like interaction, facilitating the attribution of social roles, emotional capacities, and varying degrees of agency (Dautenhahn, 2007; De Boer et al., 2021; Horstmann & Krämer, 2019). As a result, social robots provide a particularly revealing lens through which to examine how journalistic discourse constructs meaning around AI.

From a theoretical perspective, these processes can be understood through agenda setting (McCombs & Shaw, 1972) and framing (Entman, 1993), in which journalists select and emphasize aspects of reality, shaping how audiences interpret technological developments. This perspective has been widely applied to the study of science and technology communication, where media frames inform public understanding of complex innovations. Journalism, therefore, does not simply report on robots; it participates in the construction of their social meaning.

2.2. Social Robots and AI Coverage in Latin America

Existing studies on AI in Latin America have primarily focused on newsroom innovation, automation, and the challenges of technological adoption in resource-constrained media environments (de-Lima-Santos & Ceron, 2022; de-Lima-Santos et al., 2025; Soto-Sanfiel et al., 2022). Such systems are frequently represented through the attribution of socially meaningful roles in journalistic discourse. These include depictions of AI as a threat to employment, as a supportive assistant in everyday contexts, or as an autonomous actor with significant influence over information environments (De-Santis et al., 2026). These representations often reflect broader societal anxieties and political concerns, particularly regarding labour, control, and the circulation of information. Accordingly, the personification of AI systems becomes a recurring discursive strategy through which abstract technological processes are translated into recognizable social actors. These role attributions are closely linked to questions of agency and control, which remain central to public debates on emerging technologies. Despite this, there is less evidence on how AI-related technologies are represented in journalistic discourse, particularly those that are not yet widely embedded in real-world scenarios.

Moreover, research in the region has tended to focus less on embodied technologies such as social robots and more on algorithmic systems and automated agents (e.g., bots, virtual agents) in political communication and digital media ecosystems (e.g., DalBen & Jurno, 2021). Within this body of work, journalistic discourse often frames AI-related technologies along two main dimensions: outward-facing narratives centred on

political and ideological risks, such as manipulation, propaganda, and threats to democratic processes (Barredo-Ibáñez et al., 2021; De-Santis et al., 2026), and inward-facing narratives focused on the transformation of journalistic practices, including automation and new journalistic formats (Chuan et al., 2019; Meneses-Fernández & Granja-González, 2026).

Emerging research conducted in Latin America suggests that AI and robotics are understood through a combination of technical and sociopolitical perspectives (Barredo-Ibáñez et al., 2021). While coverage highlights technological features such as efficiency, speed, and algorithmic capabilities, it also situates these technologies within broader narratives associated with public concerns, fears, expectations, and power dynamics (De-Santis et al., 2026; Magalhães & Smit, 2025; Neudert et al., 2020). This evolution has been described as progressing through successive narrative stages, in which AI is framed first as a potential threat or disruptive force, then as the subject of institutional debates surrounding education, labour, and regulation, and more recently as an everyday, albeit imperfect, tool requiring human supervision (Magalhães & Smit, 2025). Across these stages, media narratives continue to reflect tensions between technological optimism and skepticism, particularly regarding employment, governance, and ethical risks (De-Santis et al., 2026; Neudert et al., 2020).

These narrative patterns are also observable in public perceptions. Comparative studies suggest that audiences in Latin America tend to express greater skepticism toward AI than those in other regions, particularly regarding its potential impact on employment and social stability (Neudert et al., 2020). Yet, despite growing scholarship on AI, systematic empirical research remains scarce on how social robots are specifically represented in Latin American news media.

By focusing on social robots as embodied mediators of AI, this study addresses this gap by examining how meaning is constructed through narrative frames, attributed roles, levels of agency, and evaluative orientations in non-WEIRD media environments. To this end, the article is guided by the following research questions (RQs):

RQ1: How are social robots framed and evaluated in Latin American news media?

RQ2: How is AI represented through social robots in Latin American news coverage in terms of attributed agency and explicit references to AI?

RQ3: What social roles, sectors of application (e.g., healthcare, education, commerce, hospitality, security, households, research, etc.), and sources cited (e.g., technology companies and manufacturers, experts, users or citizens, government authorities, etc.) are associated with social robots in Latin American news media?

RQ4: How do these media representations contribute to making AI intelligible in contexts of limited technological adoption?

3. Methods

3.1. Research Design

This study employs a quantitative content analysis (Neuendorf, 2017; Wimmer & Dominick, 2003) to examine how social robots and AI are represented in news media. Previous studies showed that content analysis is particularly suitable for identifying patterns in media discourse and capturing how emerging technologies are framed, evaluated, and socially constructed in journalistic texts (Chuan et al., 2019; Cools et al., 2024; De Boer et al., 2021). The unit of analysis is the individual news item, defined as any journalistic piece (written article or audiovisual report) that explicitly refers to social robots. Each unit was treated as a discrete analytical entity regardless of format, and audiovisual content was transcribed to ensure comparability.

3.2. Data Collection

The dataset was constructed through a systematic retrieval of news articles using Google's general search engine in its news search mode, rather than the Google News interface. Google was selected because it is the dominant search engine across the countries included in this study (StatCounter Global Stats, 2026). The news search mode prioritizes journalistic content while excluding general web results. This decision was based on the technical limitations of the Google News interface, which restricts the number of visible results to approximately 100 per query, thereby limiting data exhaustiveness.

To address these constraints, data extraction was conducted using the SerpApi service, which allows programmatic access to Google's news search results. This approach enabled deeper access to indexed content and extended pagination beyond standard search limits.

Search queries were conducted using the terms *robots sociales* (Spanish) and *robôs sociais* (Portuguese). To ensure geographical diversity, seven independent extraction processes were performed by simulating user locations in Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela. These locations were selected because they correspond to countries for which Google provides localized news aggregation services, allowing the retrieval of country-specific news results. This procedure allowed Google's ranking algorithm to prioritize locally relevant sources in each case.

Through this process, a total of 3,377 news items were initially retrieved (Peru: 440; Venezuela: 520; Argentina: 448; Chile: 513; Mexico: 495; Colombia: 530; Brazil: 431). All searches were conducted using consistent parameters (desktop device, Latin American Spanish and Brazilian Portuguese language settings, and a standardized user agent).

3.3. Data Filtering and Sample Construction

A two-stage filtering process was applied to ensure the relevance and quality of the corpus. First, article titles were manually screened to remove duplicate items, non-journalistic sources (e.g., institutional websites, NGOs, startups), and academic or non-news content. Only items published by generalist or specialized media outlets were retained. When the same article appeared across multiple countries, only one instance was kept, reducing the dataset to 425 news items.

Second, the full text of each article was manually reviewed to verify its eligibility before being retrieved and incorporated into the dataset. This process resulted in a final sample of 404 news items.

The corpus includes written news articles and audiovisual news pieces (e.g., video reports). To ensure comparability across formats, audiovisual content was manually transcribed and incorporated into the dataset, allowing all units of analysis to be coded as textual material. The analysed corpus spans the period 2006–2026, with a higher concentration of articles in 2024 and 2025.

3.4. Codebook and Variables

The coding scheme was developed based on previous research in media framing, science communication, and human–robot interaction and refined through an iterative codebook development process (Belpaeme & Tanaka, 2021; Chuan et al., 2019; De Boer et al., 2021; Ferrer & Aymerich-Franch, 2026; Nisbet & Scheufele, 2009; Riemer & Wischniewski, 2019; Schäfer, 2017). The codebook includes detailed definitions, instructions, and examples for each variable to ensure consistency across coders fluent in English, Spanish, and Portuguese. Before the main coding process, a pilot test was conducted to evaluate the clarity and applicability of the coding scheme, leading to minor adjustments to the category definitions.

The final codebook comprises seven nominal variables organized into three analytical dimensions: (a) journalistic treatment (main frame, evaluative tone); (b) representation of AI through social robots (attributed level of agency, explicit mention of AI); and (c) social functions (social role, sector of application, primary source cited). All variables were coded according to the dominant category identified in each article.

Frames were identified following framing theory (Entman, 1993) and prior research on science communication (Nisbet & Scheufele, 2009; Schäfer, 2017) as well as AI and robotics coverage (Chuan et al., 2019; De Boer et al., 2021; Riemer & Wischniewski, 2019).

3.5. Coding Procedure

The use of LLMs for content analysis is an emerging methodological approach in communication research. Previous studies indicate that LLMs can perform deductive coding tasks using predefined codebooks, achieving levels of agreement comparable to those of human coders (Bermejo et al., 2025; Chew et al., 2023; Dunivin, 2025; Hohenwalde et al., 2025), particularly when combined with validation procedures. These approaches have been applied to thematic coding and news framing analysis, supporting the identification of discursive patterns in large textual datasets (Khan et al., 2024; Rifaie et al., 2025; Tohidi et al., 2025).

In this study, the full corpus ($N = 404$) was coded using the LLM Claude (Anthropic), following an LLM-assisted content analysis (LACA) approach (Dunivin, 2025; Tai et al., 2024). The model was implemented as a coding assistant using the validated codebook and a calibration process. To support interpretative consistency, the coding procedure required the model to provide structured justifications for its classifications. This step made explicit how coding decisions were derived from the textual data and facilitated the identification of ambiguous cases. Following the intercoder reliability assessment, the validated codebook was applied to the full dataset using Claude.

This procedure enabled the systematic and consistent application of the codebook across a multilingual corpus, while reducing variability associated with manual coding. In line with this study's focus, AI is examined not only as an object of media representation but also as part of the analytical process.

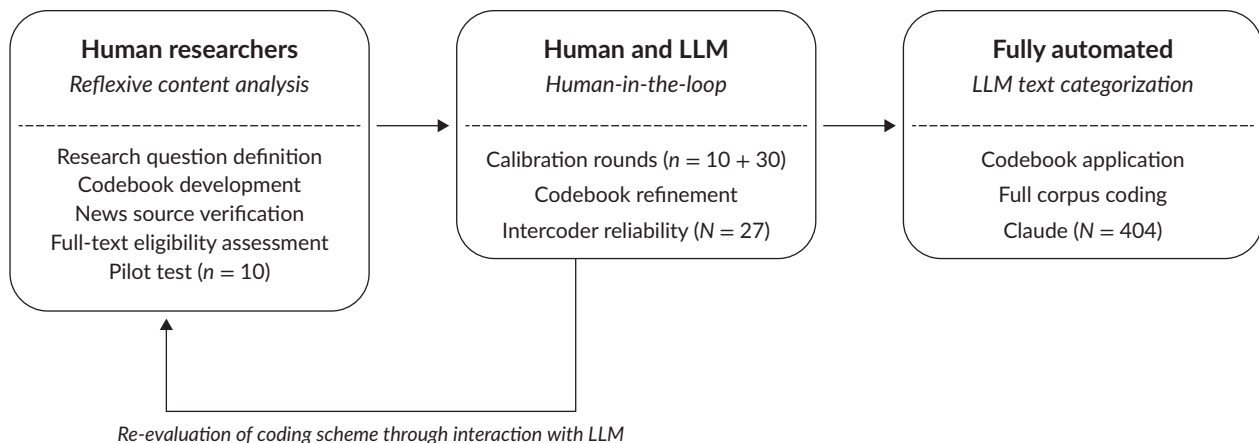


Figure 1. Hybrid workflow for LLM-assisted content analysis. Notes: The figure summarizes the three-stage coding procedure, from codebook development and two calibration rounds to the application of the validated codebook to the full corpus using Claude; the feedback arrow indicates the iterative refinement of the coding scheme through interaction with the LLM. Source: Authors, adapted from Dunivin (2025).

3.6. Data Validation

Before the intercoder reliability test, two calibration rounds were conducted to align the interpretation of coding categories between the human coder and the LLM system (Claude). In the first round, a sample of 10 news articles was collaboratively coded to refine category definitions and resolve initial ambiguities. A second round using 30 articles enabled further refinement of the codebook before the reliability assessment.

Intercoeder reliability was assessed on a subsample of 27 news articles using Krippendorff's alpha (α), which corrects for chance agreement (Hayes & Krippendorff, 2007; Krippendorff, 2019). Values above .80 indicate excellent reliability, while values between .67 and .79 are considered acceptable.

Table 1. Intercoeder reliability (Krippendorff's α).

Variable	Agreement (%)	Krippendorff (α)
Frame	96.3%	.951
Tone	85.2%	.791
Agency	92.6%	.480
AI Mention	85.2%	.709
Social Role	81.5%	.757
Sector	85.2%	.804
Source	85.2%	.763
GLOBAL MEDIA	87.3%	.836

Source: Authors.

Krippendorff's α ranged from .480 for agency to .951 for frame, with an overall α of .836. The low coefficient for Agency, despite 92.6% observed agreement, reflects a statistical artifact resulting from the near-absence of distributional variance—91.1% of cases were coded as semiautonomous—rather than conceptual ambiguity in the codebook (Hayes & Krippendorff, 2007). All remaining variables met or exceeded the minimum acceptable reliability threshold ($\alpha \geq .67$; Krippendorff, 2019).

4. Results

The analysed corpus contains 404 news items on social robots published in Spanish- and Portuguese-language media. The temporal distribution is uneven, with a concentration of publications in 2025 ($n = 138$) and 2024 ($n = 50$). To a lesser extent, articles appear in 2023 ($n = 38$), followed by 2026 ($n = 32$), 2021 ($n = 30$), 2022 ($n = 29$), 2020 ($n = 20$), 2018 ($n = 19$), 2019 ($n = 18$), 2017 ($n = 9$), 2016 ($n = 5$), 2015 ($n = 5$), 2014 ($n = 4$), 2013 ($n = 3$), 2012 ($n = 1$), 2011 ($n = 1$), 2008 ($n = 1$), and 2006 ($n = 1$).

This distribution of the corpus suggests a clear increase in coverage in recent years, particularly between 2023 and 2025. This pattern coincides with the growing public visibility of AI following the emergence of GenAI systems such as ChatGPT, which intensified media attention toward AI-related technologies. Although earlier studies reported the increased use of robots in healthcare contexts during the Covid-19 pandemic (Aymerich-Franch & Ferrer, 2022), the data do not show a distinct peak in social robots' media coverage during 2020–2021 in Latin America.

Results are presented according to the three analytical dimensions defined in the codebook, beginning with journalistic treatment and followed by representations of AI and social functions.

4.1. Narrative Frames and Evaluative Tone

Narrative frames were classified into seven categories: care and assistance (robot as social, educational, therapeutic, or healthcare support), technological innovation (scientific advance and progress), human-robot social interaction (emotional or relational bonds), labour substitution (robot as replacement for human workers), risk or threat (negative consequences foregrounded), ethical dilemma (privacy, regulation, rights), and curiosity or spectacle (robot as media novelty).

Care and assistance were the dominant narrative frame (50.5%), followed by technological innovation (16.8%), and human-robot social interaction (15.1%). Other frames appear far less frequently, including curiosity or spectacle (6.7%), labour substitution (6.4%), risk or threat (2.5%), and ethical dilemmas (2.0%; see Figure 2). Overall, news coverage of social robots in Latin America is predominantly framed through narratives of care and assistance.

Evaluative tone was classified into four categories: positive (technology presented as beneficial or promising), negative (risks or harmful consequences foregrounded), ambivalent (benefits and risks present without one prevailing), and neutral (factual description without evaluative orientation).

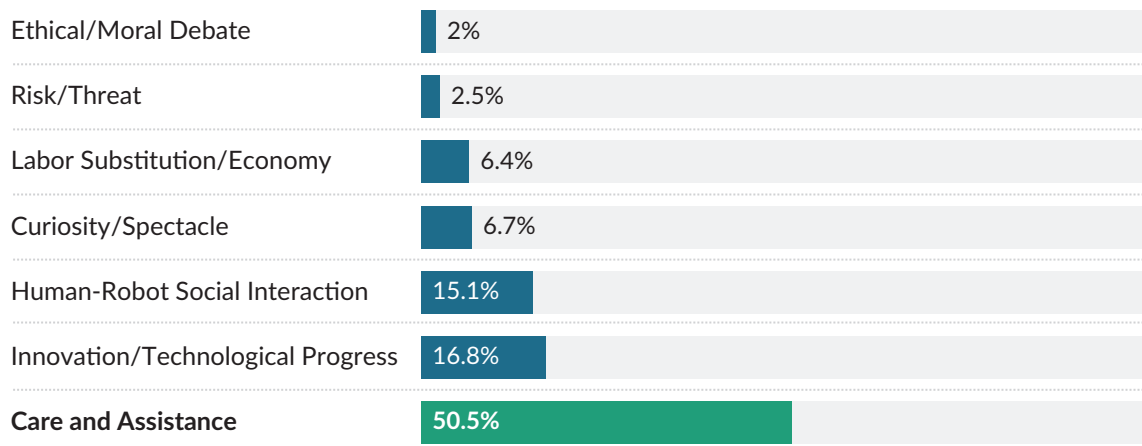


Figure 2. Main frame of the news item. Source: Authors.

Regarding evaluative tone, 44.6% of the articles adopt a positive orientation and 44.8% present an ambivalent tone. Negative coverage remains marginal, accounting for only 4.0% of the sample, while neutral coverage accounted for the remaining 6.6%.

4.2. Representation of AI

The level of agency attributed to robots in this study distinguishes among autonomous robots (independent decision-making), semiautonomous robots (requiring human intervention), and teleoperated robots (complete external control). Most social robots are described as semiautonomous systems (91.1%), combining AI with human supervision. Fully autonomous robots appear in 2.7% of the sample, while teleoperated robots account for 6.2%.

Explicit references to AI were presented as a dichotomous variable: absent (technological invisibility) or present (explicit reference to AI). Overall, 61.4% of the articles ($n = 248$) explicitly mentioned AI, whereas 38.6% ($n = 156$) did not refer to the underlying technology. The distribution of AI mentions showed only limited variation across levels of attributed agency—teleoperated (72.0%), semiautonomous (60.9%), and autonomous (54.5%)—suggesting that the explicit visibility of AI in news coverage is largely independent of how the robot's autonomy is described.

4.3. Social Roles, Sectors, and Sources

Social roles attributed to robots were classified as assistant or helper (support for human activities), caregiver or companion (wellbeing or emotional accompaniment), worker or employee (functional substitute for human labour), technological tool (functional device without social dimension), scientific experiment or demonstration (research context, no real-world social use).

The most frequently attributed role is that of assistant or helper (52.5%), followed by caregiver or companion (20.8%), technological tool (8.7%), experiment or demonstration (8.7%), worker or employee (6.9%) and other roles (2.4%). Together, assistant and caregiver account for 73.3% of the corpus.

Sectors of application were classified as healthcare (medical and care settings), education (learning contexts), commerce and hospitality (customer services), security and public services (surveillance), domestic settings (personal or home use), research and laboratory (scientific development), and other sectors.

In terms of sectoral distribution, research and laboratory settings account for 36.1% of the coverage, followed by healthcare (27.2%), education (14.4%), domestic settings (12.9%), commerce and hospitality (5.4%), other sectors (3.2%), and security (0.7%).

Sources cited in the articles were classified in six categories: technology companies and manufacturers (industry voice), scientists and experts (academic voice), users or citizens (civic voice), government authorities (institutional voice), multiple sources (no dominant voice), and no identifiable source (unsourced content).

Half of the articles (50.0%) rely on multiple sources, citing more than one source. Among single-source references, technology companies and manufacturers are the most frequent (23.8%), followed by scientists and experts (16.3%). In contrast, users or citizens appear as the primary source in only 2.7% of the articles, while government sources account for just 0.7%, and 6.5% of the articles do not include an identifiable source.

4.4. Associations Between Variables

To examine associations, Cramér's V was calculated, as all variables are nominal. Pearson and Spearman's coefficients were not suitable in this case, since the former requires continuous variables with a normal distribution, while the latter assumes ordinal variables with a meaningful ranking. Cramér's V , derived from the χ^2 statistic, does not rely on these assumptions (Bergsma, 2013; Cramér, 1946). Thresholds of .10, .20, and .30 were used to indicate weak, moderate, and strong associations, respectively (see Table 2).

Overall, no associations exceeded $V = .30$, indicating that all observed associations were weak to moderate. The strongest relationship was found between frame and tone ($V = .278$, $p < .01$). Articles framed around care and assistance were more likely to adopt a positive or ambivalent tone. In contrast, those framed as risk or threat are more often associated with negative evaluations.

A moderate association is also observed between tone and source ($V = .237$, $p < .01$). Articles drawing on corporate sources more frequently adopt a positive tone. Similarly, tone and explicit mention of AI show a moderate association ($V = .201$, $p < .01$), with articles that explicitly refer to AI more often displaying an ambivalent rather than a positive orientation. Agency shows the weakest associations across the matrix, none exceeding $V = .18$, indicating that how robot autonomy is described shows little association with framing, tone, or source composition.

Explicit mentions of AI vary across narrative frames. However, the association remains weak ($V = .179$, $p < .05$). Frames related to labour substitution (80.8%) and risk or threat (80.0%) show the highest proportion of explicit references to AI. In contrast, the curiosity or spectacle frame presents the lowest proportion (37.0%). The dominant care and assistance frame (59.8%) is close to the overall average (61.4%).

Finally, sector and source are moderately associated ($V = .229$, $p < .01$). Articles related to healthcare more frequently rely on scientific sources, while those focusing on research and laboratory contexts tend to combine corporate and scientific actors. Several weak but significant associations also emerge: frame $\times$ social role ($V = .19$), frame $\times$ sector ($V = .19$), and social role $\times$ sector ($V = .18$), suggesting that framing choices, attributed roles, and sectors of application form a coherent representational pattern.

Table 2. Association matrix (Cramér's V ; $N = 404$).

	Frame	Tone	Agency	AI mention	Social role	Sector	Source
Frame	1.00	0.28**	0.12	0.18*	0.19**	0.19**	0.18**
Tone	0.28**	1.00	0.09	0.20**	0.14	0.17*	0.24**
Agency	0.12	0.09	1.00	0.06	0.18**	0.13	0.11
AI Mention	0.18*	0.20**	0.06	1.00	0.15	0.05	0.18*
Social Role	0.19**	0.14	0.18**	0.15	1.00	0.18**	0.14*
Sector	0.19**	0.17*	0.13	0.05	0.18**	1.00	0.23**
Source	0.18**	0.24**	0.11	0.18*	0.14*	0.23**	1.00

Source: Authors.

To facilitate interpretation, Table 3 summarizes the statistically significant associations of moderate strength ($V \geq .20$). These associations are consistent with the broader patterns identified in the descriptive analysis, particularly the alignment between dominant frames, evaluative tone, and the types of sources shaping news narratives.

Table 3. Variable pairs with moderate or strong associations ($V \geq .20$).

Variables	Cramér's V	p	Sig.	Magnitude
Frame $\times$ Tone	0.278	0.0000	**	Moderate
Tone $\times$ AI mention	0.201	0.0010	**	Moderate
Tone $\times$ Source	0.237	0.0000	**	Moderate
Sector $\times$ Source	0.229	0.0000	**	Moderate

Notes: $N = 404$; Cramér's V ranges from 0 to 1; values $\geq .10$ indicate weak associations, $\geq .20$ moderate, and $\geq .30$ strong; * $p < .05$. ** $p < .01$. Source: Authors.

Taken together, the results show a pattern of coverage in which social robots are predominantly portrayed as assistants or caregivers, situated mainly in healthcare and laboratory contexts, and described as semiautonomous systems. Coverage is largely positive or ambivalent, and the narratives are primarily constructed from corporate and scientific sources.

5. Discussion and Conclusion

This study examined how social robots are represented in Latin American news media across three analytical dimensions: journalistic treatment, representation of AI through social robots, and social functions.

In terms of journalistic treatment (RQ1), the findings indicate that coverage is predominantly organized around care and assistance frames, accompanied by positive/optimistic or ambivalent evaluative tones. Frames that present social robots as a threat, associated with labour substitution, and ethical dilemmas

appear only marginally. This pattern is consistent with previous research indicating that media representations of emerging technologies tend to emphasize socially beneficial applications, particularly in healthcare and customer service (Aymerich-Franch & Ferrer, 2023; Dwyer et al., 2023; Solberg & Kirchhoff, 2024). These narratives often portray robots as assistive tools designed to work side by side with humans, effectively framing them as companions rather than replacements (Solberg & Kirchhoff, 2024).

At the same time, the limited presence of conflict-oriented frames contrasts with studies highlighting risk and disruption in AI coverage (Nguyen & Hekman, 2022; Riemer & Wischniewski, 2019). This suggests that, in the Latin American media, coverage tends to foreground functional and socially acceptable uses of technology while reducing the visibility of tensions or controversies. This pattern aligns with what has been described as technological objectivism, where robots are presented as neutral, science-based entities, thereby obscuring potential bias or ethical dilemmas (Dwyer et al., 2023).

Addressing RQ2 (representation of AI), the results show that agency is mostly framed as semiautonomous, with robots described as operating under human supervision and rarely portrayed as fully independent agents. They are instead presented as systems that operate in coordination with human actors, reinforcing a vision of AI as supervised and controllable.

Although many articles explicitly refer to AI, a substantial proportion do not mention the underlying technology. This uneven visibility suggests that AI is sometimes left implicit, while its effects are foregrounded through the robot's embodied presence. For example, when a robot is shown caring for or accompanying an older adult, the news item shows what the technology can do, not necessarily how it works. This interpretation is consistent with research showing that social robots facilitate the attribution of agency and intentionality by translating abstract computational processes into socially recognizable forms (Belpaeme & Tanaka, 2021; De Boer et al., 2021). Embodiment thus functions as a narrative resource, allowing AI to be understood through recognizable social roles (care, assistance, companionship) without requiring technical explanation.

The relationship between the robot's attributed agency and the explicit mention of AI further supports this interpretation. Although most robots are described as semiautonomous systems, references to AI are not consistently present across all articles, indicating that journalistic discourse often treats AI as an implicit attribute of social robots. This may blur the distinction between advanced AI and simpler forms of automation, reinforcing the perception that robot agency necessarily implies AI capabilities.

Overall, these findings suggest that journalistic narratives prioritize interpretability over technical precision (Entman, 1993; Nisbet, 2009). Rather than treating social robots and AI as interchangeable concepts, the findings show that robots provide the embodied medium through which AI becomes publicly interpretable.

Regarding the social functions (RQ3), social robots are primarily presented as assistants and caregivers, situated mainly in healthcare and research contexts. Notably, research and laboratory settings account for the largest share of coverage, exceeding that of real-world application domains such as healthcare, education, or domestic environments.

This distribution suggests that social robots continue to be represented primarily within controlled and experimental settings rather than as technologies embedded in everyday life, indicating that their presence in real-world settings remains restricted, a gap between representation and deployment that has been noted in prior research on social robots (Aymerich-Franch & Ferrer, 2020, 2022, 2023; Ferrer & Aymerich-Franch, 2026).

Coverage mainly relies on corporate and scientific sources. This configuration indicates that social robots are framed as functional and supportive technologies embedded in institutional settings, rather than as contested or disruptive actors. The prominence of expert and industry voices aligns with previous studies showing that technological narratives are often shaped by institutional sources that tend to promote innovation-oriented perspectives (Chuan et al., 2019; Garvey & Maskal, 2020).

These findings address RQ4 by showing how journalistic representations contribute to making AI intelligible in contexts of limited technological adoption. Unlike algorithmic systems, which remain invisible and difficult to represent, social robots provide a tangible and visually accessible form through which AI can be communicated. Their material presence allows journalists to situate these technologies within familiar social environments—such as hospitals, homes, or educational settings—thereby supporting narrative construction. This intelligibility does not necessarily depend on explicit references to AI but often emerges through the robot's physical embodiment.

The media coverage relies on recognizable social roles such as assistants, caregivers, or companions. Through processes such as anthropomorphism, dramatization, and moralization, complex technological systems are translated into socially meaningful forms. In the absence of widespread direct interaction with social robots, these mediated representations become a primary point of reference through which audiences encounter these technologies (Horstmann & Krämer, 2019). News coverage therefore not only reports on technological developments but also contributes to the construction of culturally grounded understandings of AI, in line with framing processes that organize public understandings of emerging technologies (Entman, 1993; Dwyer et al., 2023; Nisbet, 2009; Schäfer, 2017). In this sense, social robots operate as a communicative interface through which AI becomes socially interpretable.

5.1. Contributions and Implications

This study offers several contributions to research on AI, journalism, and media representation in non-WEIRD contexts. First, it provides one of the first systematic empirical analyses of how social robots are represented in Latin American news media.

Second, the findings suggest that journalistic framing is influenced not only by editorial decisions but also by the stage of technological development and by the actors who have access to public discourse. The predominance of corporate and scientific sources favours innovation-oriented narratives and may limit the presence of alternative or critical perspectives.

Third, the largely positive or ambivalent tone identified in the corpus appears to contrast with earlier research reporting relatively high levels of public concern about AI in Latin America (Neudert et al., 2020). Although media discourse is only one among multiple factors influencing public opinion, this contrast suggests that journalistic representations may be associated with changes in how AI is understood over time.

Finally, the study introduces a methodological contribution. The use of AI-assisted coding adds a reflexive dimension to the research design, as AI is not only the object of analysis but also part of the analytical process. This dual role reflects ongoing changes in knowledge production and media research practices in the context of algorithmic technologies.

5.2. Limitations

This study has several limitations. The dataset was constructed through Google's search algorithm, which does not capture the full media landscape and reflects visibility rather than exhaustiveness. AI-assisted coding, while enabling large-scale analysis, may introduce bias in interpreting nuanced categories despite calibration and reliability procedures.

A further limitation concerns the reliance on Google News as the primary data source. Although Google is the dominant search engine across the countries included in this study (StatCounter Global Stats, 2026), its proprietary ranking algorithms privilege visibility rather than a representative cross-section of national media coverage. This introduces a potential ranking bias, as outlets with stronger search engine optimization, greater digital infrastructure, or higher domain authority are more likely to surface prominently in results, regardless of their actual reach or influence within a given country. Moreover, because Google market share and usage patterns are not uniform across the selected contexts, the comparability of the sample may be affected. This is particularly relevant for the Spanish-speaking countries included in the analysis, where retrieved articles may disproportionately reflect coverage from larger, more digitally developed media markets rather than smaller or more local outlets that are less optimized for search visibility. Future research could address this limitation by triangulating Google News results with media monitoring databases or direct outlet-level sampling to achieve a more balanced representation of the media landscape.

Finally, the study focuses on media content and does not address production processes or audience reception, and its findings are specific to social robots and not generalizable to other AI systems. Further work could examine how news representations influence public perceptions of social robots and compare these narratives with those circulating on social media platforms and other media environments.

5.3. Conclusion

In conclusion, news coverage of social robots in Latin America is characterized by a predominantly functional and non-conflictive representation, structured around care, assistance, and controlled agency. By analysing how these narratives are constructed, this study contributes to understanding how AI is publicly interpreted in contexts where it is primarily encountered through media discourse. More broadly, it demonstrates that journalism does not merely report on AI; it helps make AI socially intelligible by giving it a recognizable body through representations of social robots. As AI continues to enter everyday life through mediated encounters, examining how journalism gives AI a body will become increasingly important for understanding how societies imagine, negotiate, and normalize emerging technologies. Future research may explore how these mediated representations evolve over time and how they are interpreted by different audiences as social robots become more widely embedded in society.

Funding

Publication of this article in open access was made possible through the institutional membership agreement between the Universitat Autònoma de Barcelona and Cogitatio Press.

Conflict of Interests

The authors declare no conflict of interests. In this article, editorial decisions were undertaken by Bruce Mutsvairo (Utrecht University).

Data Availability

The dataset supporting the findings of this study is available from the corresponding author upon reasonable request.

LLMs Disclosure

Claude (Anthropic) was used as a coding assistant to apply the validated codebook to the full corpus ($N = 404$), following a LACA approach (Dunivin, 2025; Tai et al., 2024).

References

- Aymerich-Franch, L., & Ferrer, I. (2020). Social robots as a brand strategy. In L. Mas-Manchón (Eds.), *Innovation in advertising and branding communication*. <https://doi.org/10.4324/9781003009276-6>
- Aymerich-Franch, L., & Ferrer, I. (2022). Liaison, safeguard, and well-being: Analyzing the role of social robots during the COVID-19 pandemic. *Technology in Society*, 70, Article 101993. <https://doi.org/10.1016/j.techsoc.2022.101993>
- Aymerich-Franch, L., & Ferrer, I. (2023). Socially assistive robots' deployment in healthcare settings: A global perspective. *International Journal of Humanoid Robotics*, 20(1), Article 2350002. <https://doi.org/10.1142/S0219843623500020>
- Barredo-Ibáñez, D., De-la-Garza-Montemayor, D. J., Torres-Toukoumidis, Á., & López-López, P. C. (2021). Artificial intelligence, communication, and democracy in Latin America: A review of the cases of Colombia, Ecuador, and Mexico. *Profesional de la Información*, 30(6). <https://doi.org/10.3145/epi.2021.nov.16>
- Belpaeme, T., Kennedy, J., Ramachandran, A., Scassellati, B., & Tanaka, F. (2018). Social robots for education: A review. *Science Robotics*, 3(21). <https://doi.org/10.1126/scirobotics.aat5954>
- Belpaeme, T., & Tanaka, F. (2021). Social robots as educators. In OECD (Eds.), *OECD digital education outlook 2021: Pushing the frontiers with AI, blockchain, and robots* (pp. 145–157). OECD. <https://doi.org/10.1787/589b283f-en>
- Bergsma, W. (2013). A bias-correction for Cramér's V and Tschuprow's T. *Journal of the Korean Statistical Society*, 42(3), 323–328. <https://doi.org/10.1016/j.jkss.2012.10.002>
- Bermejo, V. J., Gago, A., Gálvez, R. H., & Harari, N. (2025). LLMs outperform outsourced human coders on complex textual analysis. *Scientific Reports*, 15(1), Article 40122. <https://doi.org/10.1038/s41598-025-23798-y>
- Chew, R., Bollenbacher, J., Wenger, M., Speer, J., & Kim, A. (2023). LLM-assisted content analysis: Using large language models to support deductive coding. *arXiv*. <https://arxiv.org/abs/2306.14924>
- Chuan, C. H., Tsai, W. H. S., & Cho, S. Y. (2019). Framing artificial intelligence in American newspapers. In V. Conitzer, G. Hadfield, & S. Vallor (Eds.), *AIES 2019—Proceedings of the 2019 AAAI/ACM conference on ai, ethics, and society*. Association for Computing Machinery. <https://doi.org/10.1145/3306618.3314285>
- Cools, H., Van Gorp, B., & Opgenhaffen, M. (2024). Where exactly between utopia and dystopia?

- A framing analysis of AI and automation in US newspapers. *Journalism*, 25(1). <https://doi.org/10.1177/14648849221122647>
- Cramér, H. (1946). *Mathematical methods of statistics*. Princeton University Press.
- DalBen, S., & Jurno, A. (2021). More than code: The complex network that involves journalism production in five Brazilian robot initiatives. *ISOJ Journal*, 11(1), 111–137. <https://shorturl.at/87064>
- Dautenhahn, K. (2007). Socially intelligent robots: Dimensions of human-robot interaction. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 362(1480), 679–704. <https://doi.org/10.1098/rstb.2006.2004>
- De Boer, S., Jansen, B., Bustos, V. M., Prinse, M., Horwitz, Y., & Hoorn, J. F. (2021). Social robotics in Eastern and Western newspapers: China and (even) Japan are optimistic. *International Journal of Innovation and Technology Management*, 18(1). <https://doi.org/10.1142/S0219877020400015>
- de-Lima-Santos, M.-F., & Ceron, W. (2022). Artificial intelligence in news media: Current perceptions and future outlook. *Journalism and Media*, 3(1), 13–26. <https://doi.org/10.3390/journalmedia3010002>
- de-Lima-Santos, M.-F., & Jamil, S. (2024). Bridging the AI divide: Human and responsible AI in news and media industries. *Emerging Media*, 2(3), 335–346. <https://doi.org/10.1177/27523543241291229>
- de-Lima-Santos, M.-F., & Salaverría, R. (2021). From data journalism to artificial intelligence: Challenges faced by La Nación in implementing computer vision in news reporting. *Palabra Clave*, 24(3), Article 2437. <https://doi.org/10.5294/pacla.2021.24.3.7>
- de-Lima-Santos, M.-F., Yeung, W. N., & Dodds, T. (2025). Guiding the way: A comprehensive examination of AI guidelines in global media. *AI & Society*, 40(4), 2585–2603. <https://doi.org/10.1007/s00146-024-01973-5>
- De-Santis, A., Torres-Toukoumidis, Á., & Morejón-Vallejo, R. (2026). Artificial intelligence in political communication and citizens' perceptions of disinformation and democratic legitimacy in Ecuador. *Social Sciences & Humanities Open*, 13, Article 102562. <https://doi.org/10.1016/j.ssaho.2026.102562>
- Duberry, J., & Hamidi, S. (2021). Contrasted media frames of AI during the COVID-19 pandemic: A content analysis of US and European newspapers. *Online Information Review*, 45(4), 758–776. <https://doi.org/10.1108/OIR-09-2020-0393>
- Dunivin, Z. O. (2025). Scaling hermeneutics: A guide to qualitative coding with LLMs for reflexive content analysis. *EPJ Data Science*, 14(28), Article 28. <https://doi.org/10.1140/epjds/s13688-025-00548-8>
- Dwyer, L., Crawford, C., & Zeller, F. (2023). Media framing of dominant ideologies in explanatory journalism concerning artificial intelligence and robotics. *Canadian Journal of Communication*, 48(4). <https://doi.org/10.3138/cjc-2022-0017>
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>
- Ferrer, I., & Aymerich-Franch, L. (2026). Social robots for education: A global analysis of deployments in real scenarios. *Educational Technology Research and Development*, 74, 1715–1736. <https://doi.org/10.1007/s11423-026-10611-4>
- Garvey, C., & Maskal, C. (2020). Sentiment analysis of the news media on artificial intelligence does not support claims of negative bias against artificial intelligence. *OMICS: A Journal of Integrative Biology*, 24(5). <https://doi.org/10.1089/omi.2019.0078>
- Gómez-Calderón, B., & Ceballos, Y. (2024). Periodismo e inteligencia artificial: El tratamiento de los chatbots en la prensa española. *Index.Comunicación*, 14(1), 281–300. <https://doi.org/10.62008/ixc/14/01period>
- Hayes, A. F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures*, 1(1), 77–89. <https://doi.org/10.1080/19312450709336664>

- Hegel, F., Muhl, C., Wrede, B., Hielscher-Fastabend, M., & Sagerer, G. (2009). Understanding social robots. In IEEE (Eds.), *Proceedings of the 2nd International Conferences on Advances in Computer-Human Interactions, ACHI 2009* (pp. 169-174). IEEE. <https://doi.org/10.1109/ACHI.2009.51>
- Hohenwalde, C., Leidecker-Sandmann, M., Promies, N., & Lehmkuhl, M. (2025). ChatGPT's potential for quantitative content analysis: Categorizing actors in German news articles. *JCOM*, 24(02), A01. <https://doi.org/10.22323/2.24020201>
- Horstmann, A. C., & Krämer, N. C. (2019). Great expectations? Relation of previous experiences with social robots in real life or in the media and expectancies based on qualitative and quantitative assessment. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00939>
- Khan, A. H., Kegalle, H., Watt, N., Whelan-Shamy, D., Ghahremanlou, L., & Magee, L. (2024). Automating thematic analysis: How LLMs analyse controversial topics. *arXiv*. <https://arxiv.org/abs/2405.06919>
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology* (4th ed.). Sage Publications. <https://doi.org/10.4135/9781071878781>
- Magalhães, J. C., & Smit, R. (2025). Less hype, more drama: Open-ended technological inevitability in journalistic discourses about AI in the US, the Netherlands, and Brazil. *Digital Journalism*, 14(2), 323–340. <https://doi.org/10.1080/21670811.2025.2522281>
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36(2), 176–187. <https://doi.org/10.1086/267990>
- Meneses-Fernández, M. D., & Granja-González, S. (2026). Narratives and representations of AI in mainstream journalism in Latin America and Spain. *Journalism Practice*. Advance online publication. <https://doi.org/10.1080/17512786.2026.2633745>
- Moran, R. E., & Shaikh, S. J. (2022). Robots in the news and newsrooms: Unpacking meta-journalistic discourse on the use of artificial intelligence in journalism. *Digital Journalism*, 10(10), 1756–1774. <https://doi.org/10.1080/21670811.2022.2085129>
- Mubin, O., Stevens, C. J., Shahid, S., Mahmud, A. A., & Dong, J.-J. (2013). A review of the applicability of robots in education. *Technology for Education and Learning*, 1(1). <https://doi.org/10.2316/journal.209.2013.1.209-0015>
- Neudert, L.-M., Knuutila, A., & Howard, P. N. (2020). *Global attitudes towards AI, machine learning & automated decision making* (Working Paper No. 2020.10). Oxford Commission on AI & Good Governance. <https://oxaig.oi.ox.ac.uk/publications/global-attitudes-towards-ai-machine-learning-automated-decision-making-2>
- Neuendorf, K. A. (2017). *The content analysis guidebook* (2nd ed.). Sage Publications. <https://doi.org/10.4135/9781071802878>
- Nguyen, D., & Hekman, E. (2022). A 'new arms race'? Framing China and the USA in AI news reporting: A comparative analysis of the Washington Post and South China Morning Post. *Global Media and China*, 7(1). <https://doi.org/10.1177/20594364221078626>
- Nguyen, D., & Hekman, E. (2024). The news framing of artificial intelligence: A critical exploration of how media discourses make sense of automation. *AI and Society*, 39(2), 437–451. <https://doi.org/10.1007/s00146-022-01511-1>
- Nisbet, M. C. (2009). Communicating climate change: Why frames matter for public engagement. *Environment: Science and Policy for Sustainable Development*, 51(2), 12–23. <https://doi.org/10.3200/ENV.51.2.12-23>
- Nisbet, M. C., & Scheufele, D. A. (2009). What's next for science communication? Promising directions and lingering distractions. *American Journal of Botany*, 96, 1767–1778. <https://doi.org/10.3732/ajb.0900041>
- Riemer, J., & Wischniewski, S. (2019). Robotics at work—News headline analysis 2016. In IEEE (Eds.),

- Proceedings of IEEE workshop on advanced robotics and its social impacts—ARSO*. IEEE. <https://doi.org/10.1109/ARSO46408.2019.8948759>
- Rifaie, F., Utomo, S. W., Sutrisno, D., & Gawi, J. M. (2025). Large language model for automated content analysis of online news on negative human tiger interactions in Indonesia. In IEEE (Eds.), *2025 International Conference on Information and Communication Technology (IColCT)*. IEEE. <https://doi.org/10.1109/IColCT66265.2025.11193063>
- Salvini, P., Laschi, C., & Dario, P. (2010). Design for acceptability: Improving robots' coexistence in human society. *International Journal of Social Robotics*, 2(4), 451–460. <https://doi.org/10.1007/s12369-010-0079-2>
- Sarisakaloğlu, A. (2021). Framing discourses in Turkish news coverage regarding artificial intelligence technologies' prospects and challenges. *Türkiye İletişim Araştırmaları Dergisi*, 37. <https://doi.org/10.17829/turcom.803338>
- Savela, N., Turja, T., & Oksanen, A. (2021). Media effects on the perceptions of robots. *Human Behavior and Emerging Technologies*, 3(5), 837–851. <https://doi.org/10.1002/hbe2.296>
- Schäfer, M. S. (2017). How changing media structures are affecting science news coverage. In K. H. Jamieson, D. Scheufele, & S. Iyengar (Eds.), *The Oxford handbook of the science of science communication* (pp. 51–59). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190497620.013.6>
- Scott Hansen, S. (2022). Public AI imaginaries: How the debate on artificial intelligence was covered in Danish newspapers and magazines 1956–2021. *Nordicom Review*, 43(1). <https://doi.org/10.2478/nor-2022-0004>
- Solberg, M., & Kirchhoff, R. (2024). Media representations of healthcare robotics in Norway 2000–2020: A topic modeling approach. *Social Science Computer Review*, 42(3). <https://doi.org/10.1177/08944393231212251>
- Soto-Sanfiel, M. T., Ibiti, A., Machado, M., Marín Ochoa, B. E., Mendoza Michilot, M., Rosell Arce, C. G., & Angulo-Brunet, A. (2022). In search of the Global South: Assessing attitudes of Latin American journalists to artificial intelligence in journalism. *Journalism Studies*, 23(10), 1197–1224. <https://doi.org/10.1080/1461670X.2022.2075786>
- StatCounter Global Stats. (2026). *Search engine market share in South America*. <https://gs.statcounter.com/search-engine-market-share/all/south-america/%26?utm>
- Stein, J.-P. (2023). Valenced media effects on robot-related attitudes and mental models: A parasocial contact approach. *Human-Machine Communication*, 6, 75–96. <https://doi.org/10.30658/hmc.6.5>
- Tai, R. H., Bentley, L. R., Xia, X., Sitt, J. M., Fankhauser, S. C., Chicas-Mosier, A. M., & Monteith, B. G. (2024). An examination of the use of large language models to aid analysis of textual data. *International Journal of Qualitative Methods*, 23, 1–14. <https://doi.org/10.1177/16094069241231168>
- Tohidi, A., Haider, S., & Watts, D. (2025). Rethinking news framing with large language models. *Scientific Reports*, 15, Article 45592. <https://doi.org/10.1038/s41598-025-29519-9>
- Vergeer, M. (2020). Artificial intelligence in the Dutch press: An analysis of topics and trends. *Communication Studies*, 71(3), 373–392. <https://doi.org/10.1080/10510974.2020.1733038>
- Wimmer, R. D., & Dominick, J. R. (2003). *Mass media research: An introduction* (7th ed.). Wadsworth; Thomson Learning.
- Wolbring, G. (2016). Employment, disabled people and robots: What is the narrative in the academic literature and Canadian newspapers? *Societies*, 6(2), Article 15. <https://doi.org/10.3390/soc6020015>

About the Authors



Iliana Ferrer is a lecturer in the Department of Audiovisual Communication and Advertising at the Universitat Autònoma de Barcelona (Spain). Her research focuses on social robots, media representations of emerging technologies, gender and sport communication, and journalism in the context of digital transformation.



Leonor Balbuena is a lecturer in the Department of Advertising, Public Relations and Audiovisual Communication at the Universitat Autònoma de Barcelona, where she also earned her PhD. Her research addresses symbolic representation, visual culture, and graphic design, with a focus on how media construct visual imaginaries of social groups and technology.



Oscar Mario Miranda-Villanueva is an assistant professor and researcher at Tecnológico de Monterrey, recognized as a National Researcher Level I by SNII. He has collaborated with various national and international institutions and currently co-directs the Media Education Research (MER) section at IAMCR (2023–2027).



Mathias-Felipe de-Lima-Santos is an assistant professor at UNSW Sydney whose research explores the intersection of media, technology, and society, focusing on AI, platform governance, and media innovation in the Global South. He is a cofounder of the Digital Media and Society Observatory (Unifesp), Associate Editor of *Journalism Practice*, and co-editor of academic books.