

# Comparing hybrid media systems in the digital age: A theoretical framework for analysis

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[journals.sagepub.com/home/ejc](http://journals.sagepub.com/home/ejc)**Alice Mattoni and Diego Ceccobelli**

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**Abstract**

The relationship between media and politics today is deeply entrenched in the wide use of information and communication technologies to the point that scholars speak about the emergence of hybrid media systems in which older and newer media logics combine. However, it is still unclear how the configuration of hybrid media systems changes across countries today, especially with regard to the interconnection between media and politics. In the article, we aim to develop a theoretical framework to capture such national differences. In so doing, we want to develop a heuristic device to understand whether the transformations brought about by information and communication technologies in the media and political realm also contribute to reshaping national media systems and to what extent. After outlining the main scope of the article in the 'Introduction' section, we discuss the theoretical framework that Hallin and Mancini developed to compare media systems across countries, and we present this framework's main strengths and weaknesses when used as a tool for understanding the relationship between media and politics in the digital era. We then argue for the need for an updated and expanded version of such a theoretical framework: first, we update its four original dimensions (structure of media market, political parallelism, state intervention and journalistic professionalism) transversely including information and communication technologies-related indicators; second, we expand the original theoretical framework with one new dimension (grassroots participation) and the related indicators. In the 'Conclusion' section, we summarize our theoretical proposal and present some indicators and potential comparative data sources to assess similarities and differences of national media systems across countries. Finally, we also note two limitations of the article.

**Keywords**

Comparative analysis, information and communication technologies, media systems, political communication, political participation

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## Introduction

The relationship between media and politics today is entrenched in the use of information and communication technologies (ICTs). National media systems – and the way we theorize and grasp their components and properties – have been affected by this phenomenon as well. To use Andrew Chadwick's (2013) terminology, media systems have become *hybrid*, meaning that ICTs have triggered a new process of 'simultaneous integration and fragmentation' (p. 15), where older media, such as newspapers and television, merge with and adapt to the formats, genres, norms and actors brought about by newer digital media. Many authors in media studies, political communication and cognate disciplines refer to two significant transformations as crucial. The first is the diffusion of social media platforms that allow citizens to engage with and network around issues in public affairs, allowing them to express their opinions in real time over multiple platforms and using different devices. The second is the diffusion of grassroots, unconventional and – at times – personalized forms of news production outside traditional news organizations. These forms have rendered the exchange of political information more pervasive than in previous decades (Bennett and Segerberg, 2013; Chadwick, 2013; Chadwick and Howard, 2008). Theoretically, these two interrelated transformations have significantly affected classic media theories and concepts, including agenda setting, newsmaking and framing (Chadwick, 2013; Hermida, 2016; Meraz and Papacharissi, 2016). In addition, empirically, these transformations have increased citizens' abilities to express their agency in relation to the media systems with which they are confronted daily.

ICTs have opened up new opportunities to organize collectively and to demand changes at the level of media systems. The mobilizations of citizens for the recognition of 'communication rights' have been developing since the late 1970s but gained new relevance starting in the early 2000s with the rise of ICTs (Milan and Padovani, 2014), when claims related to media corporations, infrastructures, regulations and specific media organizations and professionals became an increasingly important feature of struggles over communication rights. However, citizens today are both formally and informally included in media production practices and routines. The newsmaking process is no longer the prerogative of a limited number of actors from the political, economic and media elite. Online-only media outlets are emerging and changing the structure of the quality press, and digital tools allow citizens to spread, debate and contest the news information produced by each media outlet in hybrid media systems, where older and newer media logics combine (Chadwick, 2013). Scholars have argued that 'online communication has the potential to challenge media-political elite linkages' (Pfetsch et al., 2013: 18), transforming power relations between elite and non-elite actors.

In this article, we develop a theoretical framework that is a heuristic device to capture national differences in 'hybrid media systems' (Chadwick, 2013) and understand whether the transformations introduced by ICTs in the media and political realms also contribute to reshaping national media systems, thus shifting the centre of political communication from elite-driven media systems to media systems in which people's choices and behaviours are increasingly important.

This article is structured as follows. The next section begins with a discussion of the theoretical framework that Hallin and Mancini (2004) developed to compare media systems across countries. We present this framework's main strengths and weaknesses when used as a tool for understanding the relationship between media and politics in the digital era. We then argue for the need for an updated and expanded version of such a theoretical framework, discussing its dimensions and the way we constructed them. Finally, we summarize our theoretical framework, propose some indicators and potential data sources to measure its dimensions and note its limitations.

## **Strengths and weaknesses of the theoretical framework for comparing media systems**

In 2004, Hallin and Mancini published *Comparing Media Systems*, a seminal volume that developed a theoretical framework to compare Western media systems arguing that they were less uniform than the previous literature indicated. Hallin and Mancini used a historical qualitative analysis of media systems and their interconnections with the different political systems of North America and Western Europe. The two authors first theorized four dimensions (structure of media market, political parallelism, state intervention and journalistic professionalism) to analyse Western media systems and then grouped Western media systems into three ideal types characterized by common trends across these four dimensions.<sup>1</sup> The volume influenced political communication studies, journalism studies and other cognate disciplines. Despite the years that have passed since its publication, it remains the starting point for most studies that analyse media systems from a comparative perspective, as well as for studies that investigate single national media systems through in-depth case studies (Hallin and Mancini, 2017). Although their work is considered a theoretical and methodological milestone, the authors have also received criticism, often accompanied by proposals to further expand their theoretical framework. While we do not aim to review these criticisms in detail, we briefly discuss them.

Works that criticized the theoretical framework developed by Hallin and Mancini can be grouped into four broad categories. First, some scholars have contested both the theoretical and methodological bases of the scientific effort made by Hallin and Mancini, arguing for a different conceptualization and heuristic strategy for analysing and understanding Western media systems (Humphreys, 2012; Norris, 2009) and underlying the omissions that the two authors made in reconstructing the 'salient features of the American media system and political context' (Curran, 2011: 43). Second, the theoretical framework presented in *Comparing Media Systems* cannot be generalized to non-Western countries. The literature suggests assessing the theoretical framework in different geopolitical areas than the Western area (Hallin and Mancini, 2012). Third, the four dimensions of the theoretical framework are too descriptive and need to be further operationalized. Some scholars have worked towards a quantitative operationalization to measure the four dimensions that compose the theoretical framework (Brüggemann et al., 2014; Büchel et al., 2016).

Finally, Hallin and Mancini's theoretical framework needs to be updated to consider the role of ICTs in today's media systems (Curran, 2011; Nielsen and Levy, 2010; Norris, 2009). Scholars studying media systems from a comparative perspective have addressed

the previous critiques. However, there is a lack of literature analysing the role that ICTs play in reshaping (or not) media systems at the national level. Hallin and Mancini recognized that their work ‘says little about the Internet and new media’ (Hallin and Mancini, 2012: 289). However, they did not extend their argument in the most recent discussion of their work (Hallin and Mancini, 2017). This article seeks to fill this gap in the literature and to propose a theoretical framework that accounts for the extent to which ICTs and their increasingly widespread use in the realm of politics have transformed media systems at the national level.

Today’s Western media systems cannot be equated to those that Hallin and Mancini analysed in their work, which was addressed in the second half of the 21st century. The two authors were aware of the contextual nature of their intellectual endeavour, and their aim was ‘to understand how media systems function *today*’ (Hallin and Mancini, 2004: 300, emphasis added). Because their *today* is our yesterday, the theoretical framework they developed should be revised accordingly. We do not claim that we should replace their theoretical framework entirely. ICTs have introduced newer media norms, actors and logic, but they combine with the media norms, actors and logic that were at work before digital technologies became widespread in the political realm (Chadwick, 2013). We argue in the following sections that the four dimensions included in Hallin and Mancini’s theoretical model are as relevant today as they were in the past. Hallin and Mancini also state that ‘the four dimensions we use for comparing media systems probably “travel” better than do our three ideal types’ (Hallin and Mancini, 2012: 287). We argue that this is valid not only across space but also across time. The three ideal types of media systems theorized in *Comparing Media Systems* are situated in a specific historical moment, but most of the dimensions used to reconstruct media systems across space analytically remain relevant today. In what follows, we show that a revision of the theoretical framework presented in *Comparing Media Systems* is necessary if we want to craft a tool that allows us to assess the role of ICTs in media systems across countries today. However, evaluating whether our theoretical framework implies a different clustering of the 18 countries considered in *Comparing Media Systems* lies beyond the scope of this article.

## **A theoretical framework to compare hybrid media systems**

*Comparing Media Systems* relied on a very parsimonious theoretical framework to understand the interactions between two realms – politics and media – made up of four main dimensions. However, the two authors employed a narrow definition of the two realms. Regarding politics, they focused on conventional and institutional political actors. Regarding media, they investigated the role of mainstream media, such as the press and television. Therefore, Hallin and Mancini constructed a theoretical framework that investigated the relationship between the spheres of elite politics and elite media. We suggest updating and expanding the theoretical framework to go beyond the elite components of the political and media realms. The theoretical framework should be updated to consider the rise of ICTs and the consequent hybridization of media systems today. We propose revising the four dimensions that are part of the theoretical framework – state intervention, structure of the media market, political parallelism and journalistic professionalization – to include indicators related to ICTs. The theoretical framework should then be expanded to acknowledge the increased importance of non-elite politics in

connection with media systems. We suggest adding a new fifth dimension that we name *grassroots participation*. In what follows, we present a detailed discussion of these changes and the resultant revised theoretical framework.

### *State intervention*

Hallin and Mancini (2004) identified three indicators to measure the dimension of state intervention. Each of them refers to one type of action in which states might be engaged in the realm of media: (1) putting public money into a public broadcasting company, (2) providing direct and/or indirect subsidies to news organizations or individual journalists and (3) regulating media concentration, ownership and competition. Although they are still relevant, these three indicators do not impart a comprehensive understanding of how Western countries consider ICTs when regulating media today. Three processes are important in this regard. First, public broadcasting companies need to develop and sustain a strong digital division to successfully respond to the exponential growth of global digital media corporations such as Facebook and Google and remain competitive, appealing and engaging. This development requires considerable public expenditures that some countries cannot afford for various reasons, among which are lack of resources due to the economic crisis that erupted in 2008, highly financed public broadcasting systems (PBSs), the shift towards a more market-oriented approach that put PBSs at the margins of the political agenda and a lack of technological skills and orientation in their executive branches (Papathanassopoulos, 2014). Furthermore, the rise of online-only media companies and outlets creates a new dilemma for states, which decide whether or not to provide them with direct and/or indirect subsidies (Nielsen, 2013). Finally, related to the two processes outlined above, the regulation of media ownership has become a challenge regarding the digital realm. Under current legislation at the national level, the ownership and monopolistic leanings of companies that provide online platforms and services, such as Google and Facebook, can barely be countered by Western countries.

To account for such variations, new types of potential state intervention should be measured. Thus, we propose two additional indicators to complement the three originally included in Hallin and Mancini's theoretical framework: (4) investments in digital infrastructures and (5) policies on digital media actors and content. First, there is no digital market without digital infrastructures, which are state-made. The more states invest in broadband and optical fibre connections, the more possibilities and incentives people have to use digital media. While private companies are creating their own material digital infrastructures – as seen in the transatlantic cables owned by Facebook and Google – this is still a limited phenomenon. Second, digital media can be regulated or unregulated, and regulation can follow different rationales and patterns. For instance, states might provide subsidies for the formation of start-up companies operating in the digital realm or overregulate this issue, discouraging and slowing the growth of a vibrant digital enterprise environment.

### *Political parallelism*

Unlike the dimension of state intervention, the dimension of political parallelism does not require the inclusion of new indicators to evaluate its quality today. As Hallin and

Mancini (2004) theorized, and Brüggemann et al. (2014) statistically validated, political parallelism can be measured through six indicators: (1) a lack of separation of news and commentary, (2) partisan influence and policy advocacy, (3) political orientation of journalists, (4) media-party parallelism, (5) political bias and (6) public service broadcasting dependence. Although the rise of ICTs affirmed new media actors such as online-only media companies and the digital versions of older media, these changes have not affected the features of political parallelism. A lack of separating news and commentary, as well as the political orientations of journalists, are dimensions that concern both traditional and online-only media, and both the analogue and digital versions of the former. The advent of a hybrid media system does not imply a clear-cut separation of norms and practices related to older and newer media. Rather, it entails a continuous integration of different types of media and political actors operating under common national beliefs and cultures.

Therefore, we expect that specific countries' adaptations to the rapid increase in the use of ICTs in the news sector might change the overall quality of political parallelism in specific cases. The United States is perhaps the most paradigmatic and discussed example. Traditionally, the United States has had a low level of political parallelism (Hallin and Mancini, 2004), and recent studies on the topic have empirically validated this assumption (Brüggemann et al., 2014). However, research also notes a transformation in the media system in the United States, detecting an increased level of political parallelism (Bennett and Iyengar, 2008). Focusing on developments in journalism after the digital media revolution, Paul Starr (2012) argued that 'the American media system is moving in a European direction – towards a more ideological organization of both the public and the news media, and a more consolidated national press' (p. 238). According to the literature, media fragmentation (Mancini, 2013) and audience polarization regarding media preferences (Sunstein, 2007) cause stronger political orientations of journalists, which were evident in the United States during the electoral campaigns for the presidential election in 2016 (Patterson, 2016). Similar to other historical, political and social factors in Southern European countries, the rise of ICTs has contributed to creating conditions that helped reshape a component of Western media systems in the United States, a country where high levels of political parallelism represent a recent novelty.

### *Structure of the media market*

The structure of the media market dimension refers to the development of the media market in a country regarding news media and according to specific patterns. Beyond (1) the rate of newspaper circulation, Hallin and Mancini employed other indicators to understand which features characterize the structure of the media market in each country: (2) the gender differences related to newspaper readership; (3) preferred modes of news consumption, comparing newspaper and television news; (4) the separation between high-quality press and tabloids and between commercial and non-commercial press; and finally (5) the relative weights of the national, regional and local press.

*Comparing Media Systems* put the development of the printed press at the centre of the media market, examining its circulation, qualities and readership. While the printed press still exists, one of the debates that developed after the diffusion of ICTs pertains to today's

relevance of the printed press and its ability to adapt to the deep transformation that the digitalization of news production and news consumption brought about in the media market. In this respect, the 2017 Digital News Report of the Reuters Institute (Newman et al., 2017) cites three relevant trends that have been detected by recent literature in journalism studies and cognate disciplines. First, online news and television news are increasingly central today, with a parallel decline in printed press readership (Westlund and Fardigh, 2011). Second, citizens rely more on different media services, platforms and devices to access news content, beyond a media diet centred on one or very few types of media channels or formats. This change means that owners of smartphones, tablets and laptops can access news content through a variety of devices, in different physical locations, and independently of the moment in which the content is published (White, 2010). Third, in addition to an interest in current affairs, age seems to be the most relevant factor in explaining different patterns of accessing news content. Information is so ubiquitous that having a media diet rich in news content is more dependent on an individual's interest in politics and on selective exposure dynamics (Prior, 2007) than on other structural factors such as the digital divide (Strömbäck et al., 2012).

Considering these changes, we propose a shift from measuring only the printed press to a broader focus on the whole structure of the media market, considering its *degree of heterogeneity* regarding the consumption of information. We consider the structure of the media market as a dimension to evaluate the overall availability of news media that prevails in a given national media system, considering its degree of heterogeneity at different levels and acknowledging the presence of ICTs in the structure of the media market.

To do this, instead of measuring only gender differences related to newspaper readership, we suggest also considering age and educational differences related to newspaper readership and engagement with other news content producers, such as television, radio and online-only media outlets. Second, we advise measuring preferred modes of news consumption across the spectrum of news content availability, going beyond the simple contrasting of newspaper and television that Hallin and Mancini scrutinized. Third, we recommend considering the separation between online media and their printed, aired or televised counterparts to detect the amount of online-only media and their relevance regarding readership in each country. Finally, considering the geographical reach of news content providers remains important to understanding the structure of the media market. However, focusing on the international dimension of news production and circulation should also be included because satellite television and online-only media bring international news providers into national media systems.

To summarize, we propose to measure the structure of the media market using the following four sub-dimensions, and we list their related indicators in the final section of the article: (1) the reach of news providers to understand which media channels and outlets are dominant in the media market; (2) the segmentation of news content providers to assess the gaps in the media market (i.e. commercial vs public news providers, quality press vs tabloids, online-only vs also online news providers); (3) the news content readership to evaluate the media market's level of inclusiveness, looking at specific demographic factors such as gender, age and education; and (4) the territorial weight of news content providers, which relates to the relative weight of national, regional and local news content providers and measures the relative weight of international news content providers.

## *Journalistic professionalism*

Although the rise of digital media has changed many aspects of the journalistic profession, journalists still act as brokers regarding the flow of information (Chadwick and Collister, 2014). Thus, the indicators that Hallin and Mancini employ in their theoretical framework are fundamental to evaluate the dimension of journalistic professionalization in different countries: (1) the internal and external autonomy of journalists, (2) the presence of professional guidelines and codes of ethics and (3) the degree of journalists' orientation towards public service are all relevant qualities that help us understand how the journalistic profession has developed in recent years. However, the widespread presence of digital media has partially transformed journalistic routines and news values, which have adapted to the embedding of ICTs in the journalistic profession (Kuhn and Nielsen, 2014).

Professionals who regularly work outside media newsrooms are an increasingly relevant part of the journalistic workforce, considering that the newsroom is no longer a centre of the journalistic profession (Deuze and Witschge, 2017). In addition, due to the opportunities offered by ICTs (Mosco, 2009), news outsourcing is more pervasive today than in the past, decreasing journalists' autonomy and challenging the professional standards of journalistic work (Örnebring and Conill, 2016). While freelancers have always been part of the journalistic workforce, this type of atypical worker is increasingly common in news organizations today, as are other types of temporary and underpaid employees (Deuze, 2007). In addition, the rise of online-only media outlets has also caused professional journalistic standards to be questioned because these outlets 'do not work on conventional business models, are inherently unprofessional (some have no paid staff at all), and are largely beyond the reach of conventional state intervention' (McCargo, 2012: 222). The quality of journalistic professionalization is changing due to the transformation of the journalistic workforce. Therefore, we consider (4) the prevalence of an atypical news workforce as a relevant indicator.

News audiences are more fragmented today than in the past. Therefore, media organizations have to produce media content that can travel across different channels and platforms quickly to reach dispersed audiences at a fast pace. In addition, for more traditional news outlets, such as newspapers and television, the viral nature of online media content has quickly become a relevant asset in the production of information (Klinger and Svensson, 2015). The shareability of news has become a relevant news value that guides journalists' choices (Harcup and O'Neill, 2016). In addition, the need to include new professionals, such as computer programmers and information architects, in the newsroom has become more urgent (Nielsen, 2012). Thus, this transformation is increasingly overturning the agenda-setting power that journalists once almost exclusively possessed. It is also changing the nature of their role as brokers. Journalists use social media as relevant sources of information, but they also consider viral social media phenomena as newsworthy events. Thus, journalists are becoming followers rather than leaders of the newsmaking process. Some scholars speak of the emergence of a networked journalist (Beckett and Mansell, 2008) who is embedded in 'networks of various professionals and citizens collaborating, correcting, and ultimately distilling the essence of the story that will be told' (Van der Haak et al., 2012: 2927). Today, formal professional training is

changing in an effort to construct new professional standards in the age of digital media. Journalists need to acquire the necessary 'digital literacy' (Martin, 2008) to cope with such deep changes in their profession. While it would be difficult to assess the overall level of journalists' digital literacy in each country, we propose taking into consideration the opportunities for journalists to acquire digital-related competencies in their professional field. Thus, we consider (5) training in digital literacy as an indicator that can help capture formal recognition of journalistic skills related to ICTs as a relevant (or not relevant) response of the journalistic profession to the changes brought by the spread of ICTs in the newsmaking process.

### *Grassroots participation*

In their recent discussion of Hallin and Mancini's theoretical framework, Esser and Pfetsch (2017) considered how each of its four dimensions could be seen as a result of the combination of media with four specific key forces in society: (1) the combination of media and the market results in the structure of the media market, (2) the combination of media and the state results in state intervention, (3) the combination of media and the party system results in political parallelism and (4) the combination of media and the autonomy of journalism results in journalistic professionalization. However, ICTs have not only transversally affected the main components and dimensions of media systems listed above. In what follows, we argue that ICTs have also increased the role of non-elite politics in the making of media systems to the point that they boosted the weight of a fifth force capable of affecting media systems. We identify this in the bottom-up participation of lay citizens such that (5) the combination of media and the bottom-up participation of lay citizens results in *grassroots participation*. Two features seem particularly relevant to assess the quality of this fifth dimension.

First, citizens are increasingly active in the formulation of demands related to the regulation of media systems and their components, through both grassroots collective initiatives and individual bottom-up demands. In several countries, citizens organize to 'politicize media and communication and to move this debate away from economic interests towards a human rights and citizen-centred perspective' (Cammaerts and Carpentier, 2007: 5). While these media-related collective actions pertaining to media often develop at the transnational level, it is also true that they need to be embedded in their local contexts (Padovani and Calabrese, 2014) and understood from a national perspective. Some of these grassroots campaigns are successful events on a short-term basis, but many of them develop over years, and some cannot reach their goals. Nevertheless, the presence of such media-related collective actions is crucial to understanding the role that lay citizens are claiming for themselves in shaping their national media systems.

Beyond these initiatives that revolve around collective organizing, there is also room for media-related actions that are centred on lay citizens' individual efforts. There are many opportunities and instruments that each citizen might use to demand changes at the level of media regulation, governance and similar matters. While it is important to assess the institutional mechanisms through which citizens formulate their claims to media systems and their components, it is equally relevant to consider similar initiatives promoted

at the grassroots level (Baldi and Hasenbrink, 2007). In this regard, ICTs have partially replaced top-down institutional mechanisms targeting media systems. In the digital age, for instance, news ombudsmen seem to be less effective than newer channels of communication such as media blogs (Fengler, 2012). In addition, the opportunity for journalists to interact with their audiences through their profiles on social media platforms also contributes to creating another space for citizens' demands at the micro level of individual media professionals (Lasorsa et al., 2012).

Second, citizens are increasingly active in the grassroots production of media content to the extent that they have transformed the newsmaking processes, agenda-setting potential and framing capabilities of more traditional news organizations, which have become mass-driven (Chadwick, 2013). The pervasiveness of more grassroots, unconventional and personalized forms of news production outside traditional news organizations is rendering the exchange of political information more ubiquitous, polycentric and centrifugal than in previous decades. Lay citizens might be collectively engaged in the production of channels of information that oppose the mainstream media logic and are often labelled alternative media (Morris, 2004). Furthermore, the development of citizen journalism practices and outlets (Deuze, 2005) is increasingly relevant today, with different degrees of engagement according to the country at stake (Forde, 2011). However, individual citizens who are not professionally involved in the media industry might become informative hubs. The wide diffusion of mobile devices makes it easy for everyone to witness and record facts that are relevant to the public. Thus, citizens become the creators of media content, either collectively through their media channels or individually using their media devices. The information created from the grassroots might (or might not) enter mainstream media in the form of user-generated content (Hermida, 2010), although this occurs according to patterns that vary according to the country under scrutiny (Thorsen and Allan, 2014).

Considering the two features outlined above, we assess the dimension grassroots participation through four indicators. Regarding citizens' formulation of demands related to the regulation of media systems and their components, we measure (1) grassroots collective initiatives related to media systems and (2) bottom-up mechanisms for citizens' participation in media systems. Regarding the grassroots production of media content, we measure (3) the development of citizen journalism and alternative media, and (4) the presence of user-generated content in the mainstream media.

## Conclusion

We began our article by asking how we can develop a theoretical framework suitable for comparing media systems across countries in the digital era. To answer this question, we built on Hallin and Mancini's (2004) work and further developed their original theoretical framework by acknowledging the increased relevance of ICTs at the level of national media systems. We focused our discussion on the dimensions that constitute the theoretical framework, updating four of them transversely and including additional indicators related to ICTs. We also expanded the framework with one new dimension to acknowledge the increasingly relevant role that lay citizens play in media systems (Table 1).

**Table 1.** Three spheres, five dimensions and their corresponding indicators to compare media systems in the digital era.

Spheres	Media		
	Elite politics	Media	Non-elite politics
Dimensions	<i>State intervention</i>	<i>Political parallelism</i>	<i>Journalistic professionalism</i>
Main Indicators	Public broadcasting Ownership regulation Press subsidies <b>Investments in digital infrastructures</b> <b>Policies related to digital actors and contents</b>	Lacking separation of news and commentary Partisan influence and policy advocacy Political orientation of journalists Media-party parallelism Political bias Public broadcasting dependence	Internal and external autonomy Professional guidelines Public service orientation <b>Atypical news workforce</b> <b>Training in digital literacy</b>
		<i>Structure of the media market</i> <b>Reach of news providers</b> <b>Segmentation of news content providers</b> <b>News content readership</b> <b>News content providers' territorial weight</b>	<b>Grassroots participation</b> <b>Grassroots collective initiatives related to media systems</b> <b>Bottom-up mechanisms for citizens' participation in media systems</b> <b>Development of citizen journalism and alternative media</b> <b>User-generated content in mainstream media</b>

Source: Brüggemann et al. (2014: 1046–1051).

The bold text indicates the added sphere, dimensions and indicators to compare media systems in the digital era.

Our work advances the definition of media systems as a heuristic device that guides a comparative analysis of political communication within and across countries in the digital age. In addition, our theoretical framework emphasizes the domestic dimension of ICTs and the ways they are embedded in national media systems. While mechanisms of transnationalization exist in the political realm, it is also true that ICTs and their use in political communication have specific configurations according to the national contexts in which they are embedded. This also means that national media systems, with their older media logic and technologies, react differently to the presence of ICTs. While previous studies explored these hypotheses, evaluating how ICTs impacted specific dimensions (for a review, see Hallin and Mancini, 2017: 164–165), our updated and expanded version provides a consistent theoretical framework to assess the role of ICTs regarding media systems. Our theoretical framework is a promising starting point from which to assess different hypotheses related to the role of ICTs and the related increased importance of lay citizens in national media systems, either in the Western world or in non-Western countries. Do ICTs act as a force for convergence, reducing previous differences between national media systems or do they reinforce existing national patterns, reinforcing the existing differences and similarities between national systems? Do ICTs have different impacts on different media systems, producing new national patterns that are different from those detected approximately 20 years ago?

We are aware of the limitations of this article. First, we focused our discussion on the role that ICTs play in changing national media systems. However, other factors also contributed to changing the relationship between politics and media in the past decade and regarding specific dimensions. Regarding political parallelism, for instance, changes in the party systems of most Western countries occurred, and new parties emerged that reached double-digit voting percentages in their first instances of electoral participation (Chiaromonte and Emanuele, 2015). Thus, it is increasingly difficult for new political forces to build strong and stable connections with mass media actors, and this might have direct consequences for political parallelism, which captures ‘to what extent and in what forms the media systems reflect the divisions of the political system’ (Hallin and Mancini, 2012: 295). Recognizing this limitation, we leave other scholars a more systematic analysis of how changes in the institutional political realms contributed to reshaping the relationship between media and politics in the past decade.

Second, Hallin and Mancini rooted their volume in an in-depth, historical, case-oriented perspective, which cannot be achieved in a journal article format. The same applies to whether the 18 countries analysed in *Comparing Media System* would cluster differently if scrutinized with our updated theoretical framework, or whether the latest technological developments are determining processes of homogenization across countries towards a single model, for example, the liberal one, as originally hypothesized by Hallin and Mancini, or the Mediterranean one, as highlighted by recent research on that topic (Starr, 2012). The aim of this article is purposely theoretical. It is a necessary step towards appreciating the granularities of contemporary media systems at the empirical level. With this purpose in mind, we end this article by proposing below a list of measures and data sources for operationalizing the new indicators that we employ to update and expand the theoretical model of *Comparing Media Systems* (Table 2).

**Table 2.** Operationalization of indicators related to ICTs.

Dimensions and indicators	Measures	Comparative datasets
State intervention		
Investments in digital infrastructures	Overall public money spent on building digital infrastructures divided by GDP Percentage of the population covered by at least a 3G mobile network 'What percentage of GDP is from tech investment?'	To be identified in future quantitative studies ITU 2017 PCRI 2016
Policies related to digital actors and content	Subsidies for the formation of companies operating in the digital realm divided by GDP General VAT rate minus average VAT rate for national companies operating in the digital realm Presence of a relevant taxation system for big digital corporations Presence of laws regulating the content published on digital platforms 'To what degree are digital companies taxed?' 'Are governments fostering and furthering online freedoms?' 'How developed are the country's laws related to the use of ICTs?'	To be identified in future quantitative studies To be identified in future qualitative studies World Bank 2016 Freedom House 2016 World Economic Forum – Executive Opinion Survey 2014
Journalistic professionalism		
Atypical news workforce	Overall professionals regularly working outside the newsroom divided by the total number of employees Overall temporary contracts divided by the total number of employees Overall freelancers divided by total number of employees	To be identified in future qualitative or quantitative studies To be identified in future qualitative or quantitative studies To be identified in future qualitative or quantitative studies
Training in digital literacy	'For how many newsrooms do you work at present?' 'For how many news outlets do you work?' 'Besides working as a journalist, do you engage in any other paid activities?' Presence of mandatory formal professional training for acquiring digital media skills 'The importance of technical skills' 'Is media ethics part of journalism education?' 'Are courses in media (ethics) well established at universities?'	WJS 2012–2016 study WJS 2012–2016 study WJS 2012–2016 study To be identified in future qualitative studies WJS 2012–2016 study MediaAcT Index MediaAcT Index

*(Continued)*

**Table 2. (Continued)**

Dimensions and indicators	Measures	Comparative datasets
Grassroots participation Grassroots collective initiatives related to media systems	'Do activist media watch websites/blogs exist?' 'Do media-related NGOs, foundations or non-profit research institutions exist?' 'Do consumer groups related to media exist?' 'Does a media observatory exist?'	MediaAct Index 2013 MediaAct Index 2013 MediaAct Index 2013 MediaAct Index 2013 MediaAct Index 2013
Bottom-up mechanisms for citizens' participation in media systems	'Do regular social media activities from the audience concerned with media accountability exist?' 'The Internet has made journalism more responsive to the public' 'Is there an "advisory council" consisting of users?' Presence of alternative media outlets	EMSS 2013 MediaAct Index 2013 To be identified in future qualitative or quantitative studies EMSS 2013
Development of citizen journalism and alternative media	'The Internet has significantly broadened the range of actors who can influence public opinion'	To be identified in future qualitative studies
User-generated content in mainstream media	'Do citizens have free access to journalistic courses?' 'Please tell me on a scale from 1 to 5, how influential are UGCs in your work?' 'Please tell me on a scale from 1 to 5, how influential is social media in your work?' 'Please tell me on a scale from 1 to 5, how influential is audience involvement in news production in your work?' 'Please tell me on a scale from 1 to 5, how influential is audience feedback in your work?'	WJS 2012–2016 study WJS 2012–2016 study WJS 2012–2016 study WJS 2012–2016 study
Structure of the media market	Standard measures of national market research institutes Standard measures of national market research institutes Standard measures of national market research institutes Standard measures of national market research institutes	WPPT 2017 Statista Statista To be identified in future quantitative studies
Reach of news providers Overall daily reach of newspapers Overall daily reach of radio newscasts Overall daily reach of TV newscasts Overall daily reach of online-only news media		

Table 2. (Continued)

Dimensions and indicators	Measures	Comparative datasets
Segmentation of news content providers		
Overall daily quality press reach divided by overall daily tabloid reach	Standard measures of national market research institutes	WPT 2017
Overall daily commercial news content providers' reach divided by overall daily public news content providers' reach	Standard measures of national market research institutes	To be identified in future quantitative studies
Overall daily online-only news content providers' reach divided by overall daily offline news content providers' reach	Standard measures of national market research institutes	To be identified in future quantitative studies
News content readership		
Daily news content reach to women divided by reach to men	Standard measures of national market research institutes	To be identified in future quantitative studies
Daily news content reach to citizens 18 to 34 years old divided by reach to citizens 35+ years old	Standard measures of national market research institutes	To be identified in future quantitative studies
Daily news content reach to citizens without a degree divided by reach to citizens with a degree	Standard measures of national market research institutes	To be identified in future quantitative studies
News content providers' territorial weight		
Overall daily national news content providers' reach	Standard measures of national market research institutes	To be identified in future quantitative studies
Overall daily international news content providers' reach	Standard measures of national market research institutes	To be identified in future quantitative studies
Overall daily local and regional news content providers' reach	Standard measures of national market research institutes	To be identified in future quantitative studies

ICTs: information and communication technologies; GDP: gross domestic product; NGOs: non-governmental organizations; UGC: user-generated content; VAT: value added tax. This table includes a first set of measures, the related comparative datasets and where to find them. It should be considered as a heuristic starting point for future comparative analyses of contemporary hybrid media systems. The datasets are as follows – ITU: International Telecommunication Union; PCRI: The Private Capital Research Institute; WJS: Worlds of Journalism Survey; MediaAct: Media Accountability and Transparency in Europe; EMSS: European Media Systems Survey; WPT: World Press Trends.

Future studies might make use of these data sources – and create those that are not yet available – to analyse media systems comparatively, finding patterns of behaviour across countries. This is a second analytical step to explore the impact of ICTs on current media systems. We developed a theoretical reflection on how to incorporate ICTs into a theoretical framework to compare media systems across the world. We also hope that our work will function as a foundation for future empirical research on the topic.

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### Note

1. Western media systems are grouped according to common trends across four dimensions: the structure of the media market, the role of the state, political parallelism and journalistic professionalism. The resulting three types of Western media systems are Liberal or North Atlantic (United States, Canada, United Kingdom and Ireland), Democratic Corporatist or North/Central European (Germany, Austria, Switzerland, Netherlands, Belgium, Denmark, Norway, Sweden and Finland) and Polarized Pluralist or Mediterranean (Italy, Spain, Greece, Portugal and France).

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