

## Delayed Reflections: Media and Journalism Data Deserts in the Post-Socialist Czech Republic

Lenka Waschková Císařová , Iveta Jansová , and Jan Motal 

Department of Media Studies and Journalism, Masaryk University, Czech Republic

**Correspondence:** Lenka Waschková Císařová ([cisarova@fss.muni.cz](mailto:cisarova@fss.muni.cz))

**Submitted:** 18 May 2023 **Accepted:** 18 August 2023 **Published:** 15 January 2024

**Issue:** This article is part of the issue “Democracy and Media Transformations in the 21st Century: Analysing Knowledge and Expertise” edited by Epp Lauk (University of Tartu / Vytautas Magnus University) and Peter Berglez (Örebro University), fully open access at <https://doi.org/10.17645/mac.i389>

### Abstract

One of the key obstacles to the normative development of post-socialist media systems, in general, and the Czech Republic in particular, is the deferral of the thoughtful reflection and critical examination of the evolution of the media industry by academics and professionals. In the early years of post-socialist development, there was a lack of collected data and relevant analysis of the state of the media and journalism. It was foreign researchers who provided the first studies of the post-socialist media systems. Plus, the commercial industry, which systematically collected data, but made it inaccessible and/or expensive. This lack of domestic contemplation and transparency led to the existence of data deserts, which made it difficult to effectively reflect upon the development of the media and its role in the transition society. This article is based on a comprehensive literature review and expert interviews with witnesses of the media industry development. These sources—academia, industry, and NGOs—make it possible to highlight specific areas that were overlooked and to propose reasons that data deserts are created in post-socialist media systems. Analysing the data through the lenses of availability, continuity, accessibility, and topicality, we delimit three eras for the general reflection of the development of the media environment, setting a distinguishable timeframe for the post-socialist media data reflection’s evolution.

### Keywords

Central European media; Eastern European media; data desert; media research; post-socialist media system; post-socialist transition

## 1. Introduction

One of the key obstacles to the development of post-socialist media systems, in general, and the Czech Republic in particular, is the delayed reflection and critical examination of the evolution of the media industry by academics and professionals. The expectations could be based on a normative assumption following the symbolic social contract between journalism and democracy about the mutual respect of freedom of speech, expression and information, and the independence of media from the state (Strömbäck, 2005).

In the early years of post-socialist development, through the 1990s, there was an undeniable lack of data collection, critical reflection, and relevant analysis of the media (e.g., Coman, 2000). There were rapid changes (e.g., in legislation) and fast development of the post-socialist media landscape, but without the capacity and will to capture it in data or to reflect it at the time. Therefore, it was first the foreign researchers to provide analytical studies of the post-socialist media systems (e.g., Gross, 2002). Plus, the commercial industry, which later systematically collected data, but made it inaccessible and/or expensive. This lack of domestic contemplation and transparency led to the creation of data deserts making it difficult to effectively reflect upon the development of the media and its role in the transition society.

Analysis of these data deserts is important for several reasons: It concerns the current state and the development of a field in society that can be a problem for (a) the development of the field itself (i.e., there is no evolution without reflection); and (b) for the transition of the whole society, particularly in terms of knowledge-based decision-making, setting new frameworks, establishing regulations, defining standards, and encouraging informed policy-making. As Thier et al. (2021, p. 1) state: “Any research field benefits from periodic examination of the body of literature produced within that discipline.”

Because we aim to define a data desert in research in a specific time and place, our lenses are logically narrowed. Nevertheless, we believe our article contributes not only to the European media development research but also to the global one. As suggested by Hallin and Mancini (2004), it is not possible to divide European and “world” media systems simply and strictly, as some principles are more universal (or vice-versa) than others. Following that, with the help of a comprehensive literature review and expert interviews with media professionals, we will reflect upon the problem of the delayed contemplation about media and journalism in a post-transition country. In this article, we first define the data desert concept and depict the specifics of the post-socialist, transition, and post-transition media reflection. Then we describe our methods and present the data.

## 2. Data Deserts

The terms “desert” or “gap” are used in communication and information research to refer to the lack or absence of something—there are information deserts and data deserts (Lee & Butler, 2019), news deserts (Abernathy, 2018), knowledge gaps, and information gaps (Jeffres et al., 2011).

Nevertheless, the meanings and definitions of these concepts vary in context and time. For example, a “knowledge gap” is mostly used in research on media effects (Gaziano, 1983; Jeffres et al., 2011; Viswanath & Finnegan, 1996). “Data desert” may refer only to the lack of information linked to the digitized data (Lee &

Butler, 2019), while a “news desert” is defined as “a community without a local newspaper” (Abernathy, 2018, p. 16).

In our view, the most fitting concept for the analysis of the lack of relevant research information in a certain field is that of the data desert, which is defined as a specific time (cf. Gaziano, 1983) and space where information—and particularly research data—is scarce (cf. Lee & Butler, 2019).

But this is not just about the availability and continuity of data. The (non)existence of data deserts is important for various reasons related to access to information. Data deserts can be a precondition for information inequality (Lee & Butler, 2019) because “power is based on the spread and possession of knowledge and information” (Viswanath & Finnegan, 1996, p. 187). They can further impact the policies, political decisions, and even the functioning of a democratic society (Abernathy, 2018).

Although we take it as an argumentative premise, that there is no evolution without reflection as part of the post-socialist transition, it must be acknowledged that our normative expectations (Strömbäck, 2005) are based on predominantly Western European practices about the availability of data on media in democratic societies (Lee & Butler, 2019). Therefore, we understand that from the broader, more global point of view, this approach to data collection and media monitoring is not universal and is just specific to certain temporal and spatial settings of societies and media systems. However, there are certainly systems that evolve without a formal record of their development (cf. Janssen et al., 2012) and where specific media benefit from the informality of their existence—from their point of view, our data desert can be seen as the norm, and efforts to monitor the media as rain or even a devastating flood.

The opposite of a data desert is continually available and accessible data, although the ideal is more than simply the openness of data. Janssen et al. (2012) summarized both the benefits of open data and the barriers to its adoption. Their typology of the benefits of open data is based on three categories—political and social, economic, and operational and technical. The political and social category includes: more transparency; more democratic accountability; more participation and public engagement; the scrutinization of data; equal access to data; the improvement of policy-making processes; more visibility for the data provider; and the stimulation of knowledge. The economic category includes: economic growth; the stimulation of competitiveness; the stimulation of innovation; and the availability of information for investors and companies. The operational and technical category includes: the ability to reuse data without the need to re-collect the same data, thus counteracting unnecessary duplication and associated costs; the improvement of public policies; easier access to data and the discovery of data; the creation of new data based on the combination of data points; external quality checks for data; the sustainability of data; and the ability to merge, integrate, and mesh public and private data (Janssen et al., 2012).

Similarly, Janssen et al. (2012) summarize the adoption barriers for open data in six categories: institutional (e.g., making public only non-value-adding data and revenue system based on creating income from data); task complexity (e.g., no access to the original data, no explanation for the meaning of data, and duplication of data); use and participation (e.g., frustration at having too many data initiatives and having to pay a fee for the data); legislation (e.g., no license for using data and limited conditions for using data); information quality (e.g., lack of information, obsolete and non-valid data, too much information to process, and similar data stored in different systems); and technical (e.g., absence of standards and no defined format).

Moreover, Janssen et al. (2012) bridge the gap between the promises and barriers of open data, like the following, which they consider myths: that publicising data will automatically yield benefits; that the publication of all information should be unrestricted; that it is a matter of simply publishing public data; that every constituent can make use of open data; and that open data will result in open government.

### 3. Specifics of the Post-Socialist, Transition, and Post-Transition Media in the Czech Republic

Focusing on the time and place for the (non)emergence of data deserts, we first describe the specifics of the development of both the society and the media system of the Czech Republic between 1989 and 2020. We can systematise this development with three time periods: post-socialist, transition, and post-transition (cf. Jakubowicz, 2006; Jebril et al., 2013; O’Neil, 1997; Surowiec & Štětka, 2020).

First, the post-socialist period (1989–1993) was the time between the Velvet Revolution in 1989, which precipitated the fall of communism, and the split up of Czechoslovakia in 1993. As O’Neil (1997, p. 1) sums up, “The absence of communism does not alone lead to democracy by default. Rather, open societies must be built (or re-built), pulling down old state structures that served to centralize political power....One of these structures is obviously the media.”

This was a time of rapid changes that influenced the development of society and the media. It included the establishment of the dual market and the emergence of public service media; the creation of new (media) laws; the privatisation of the state media; and the entry of foreign investors and owners of media organisations (Waschková Císařová & Metyková, 2015).

Second, the transition period (1993–2004) was framed by the establishment of the Czech Republic and its membership in the EU 11 years later. Jebril et al. (2013, p. 9) consider the countries of Central and Eastern Europe (CEE):

To represent a more or less “complete” case of democratisation. We have witnessed the beginning, middle, and end of transition as many of the countries of this region have not only moved away from authoritarianism towards democracy but have succeeded in doing so (e.g., with membership in the EU).

In this period, the transition established by the decisions of the first period was realized. This led to the concentration of media ownership, the establishment of foreign media owners, and media commercialisation (Štětka, 2010, 2012, 2013). Nevertheless, it took time to reflect on the “specifics” of the CEE transition of the media (Coman, 2000; Sparks, 2000).

Third, the post-transition period is the period after 2004. Its first part was shaped by the transformation of media ownership—from foreign to domestic and its oligarchization (Štětka, 2010, 2012, 2013; Waschková Císařová & Metyková, 2015). Later, in the 2010s, authors began to point out democratic backsliding in the CEE region, including the rise of authoritarian political parties; growing right-wing populism; societal polarisation; and the deterioration of media freedom. This led to an illiberal democracy (Surowiec & Štětka, 2020, pp. 1, 2).

The relevant data sources focusing on CEE media development were scarce at the beginning, even though Coman (2000, p. 35) considered “the amount of research-based information about media transformations has increased considerably, and the number of books and articles published on this topic has grown apace.” In his opinion, “it is still unrealistic to present a definitive view about mass media in post-communist countries.” He has several reasons for this, besides the quick evolution of said media systems:

Information about these changes is incomplete...sometimes excessively partisan. Systems for monitoring the press are barely established, and information related to media economics, distribution systems, audience demographics for specific broadcast programs, and media personnel’s social and professional status is scarce and unreliable....Research on media development...can be difficult to obtain or, sometimes, inadequate for definitive analysis. Studies based on field research are published in the language of the countries where the research was conducted and are usually inaccessible to foreign researchers. Moreover, articles edited in a few books and numerous academic journals with wider circulations reveal a partial vision because of their focus on “exotic” aspects of a topic. (Coman, 2000, pp. 35–36)

Later, during the post-transition period, the Czech media system was addressed in comparative research from the European perspective (Dobek-Ostrowska et al., 2010; Głowacki et al., 2014; Jakubowicz, 2006; Rantanen, 2013).

Nevertheless, as several authors point out (Jebril et al., 2013; Waschková Císařová & Metyková, 2015), after 2010, there was still a lack of research data and literature on the changes in journalism and media in post-communist countries. Plus, some topics were, according to Jebril et al. (2013, p. 10), covered more than others within particular periods:

The fact that more than two decades after the beginning of a transition in Central and Eastern Europe, the very question about the contribution of the media to the process of democratization remains very much unanswered—or answered in a way that is far from unequivocal—could possibly also be attributed to the shift in research orientation of a large part of CEE media scholarship in the course of the last decade.

Aware of (a) the specifics of the post-transition media system development and (b) the existing criticism of the lack of relevant information and data about media in the Czech Republic, we decided to formulate our aim with the following research questions: What is the availability, continuity, and accessibility of the data about media in the Czech Republic between 1989 and 2020? What is its format, and who are the producers?

## 4. Method

The article stems from a combination of a comprehensive literature review (Mediadelcom, 2023) and expert interviews with witnesses of media development in the Czech Republic—media professionals. Due to the small size of the Czech academic field and the media industry, our literature review data gathering was carried out in an “everything we can find” manner (cf. “a bird’s-eye view,” Thier et al., 2021). We included published academic texts (i.e., articles, books, and reports); student theses; media industry data; and NGOs data. We aimed to audit all (even non-peer-reviewed) literature about media in the Czech context (cf. Thier et al., 2021).

A total of 709 sources were analysed (see Mediadelcom, 2023, for more detailed information). The search was conducted through the databases (i.e., library databases, Web of Science, Scopus, and Google Scholar) and professional online sources (i.e., publicly accessible online repositories of media industry data), with keywords and the names of relevant organisations and experts for the time frame of 1989–2020. Academic texts dominated (370), with student theses next (256). The media industry and NGOs data (83) were the least publicly available.

From January to February 2022, we collected 11 semi-structured online expert interviews. The interviewees were significant in the historical development of media studies, the academic field of journalism, and professional journalism. The rich palette included: media ethics experts, journalism and media studies researchers, leaders of the journalism and media studies departments, media industry specialists, NGO representatives, and journalists themselves (for more, see a list of interviewees in the Supplementary Material). Since we conducted expert interviews, most interviewees are cited under their real names; however, several representatives asked for anonymisation.

The interviews focused on mapping the development of the Czech media landscape after 1989 and the local history of the media studies and journalism field. Four key areas were considered: risks and opportunities (from the point of view of laws and ethics, journalism and journalists, and users and their competencies); critical junctures in the development; key actors; and the future prognosis based on historical knowledge. The data desert indicators, the issues of availability, continuity, accessibility, and topicality, emerged as recurring themes from both types of analysis.

The interviews, conducted in Czech, lasted 60 to 90 minutes. They were recorded, transcribed, translated, and a thematic analysis was conducted. Three coders coded the data inductively. The researchers first familiarized themselves with the data. Then they coded the text manually, searched for themes with broader patterns of meaning, and defined and named them. A continual revision of codes ensured intercoder reliability (Braun & Clarke, 2006).

## 5. Findings

After analysing the data through the lenses of the introduced concept of data deserts, we can delimit three eras for the general reflection of the development of the media environment, setting a distinguishable timeframe for the post-socialist media data evolution, which corresponds to our typology of the post-socialist media system development (see above). We coined each era by its most typical characteristic. This temporal periodisation also corresponds to our interviewees' descriptions of the development of media reflection (Burgr, Jirák, Academic 1, and Industry Representative 1 and 2).

### 5.1. Starting From Scratch Era

The first period of media reflection began in the early 1990s after the democratic establishment replaced the old regime in 1989. We symptomatically coined this era as starting from scratch. It lasted until the early 2000s. As such, the modern evolution of the media system in the Czech Republic could begin, including thoughtful contemplation and data gathering. In this period, everything developed from scratch, including the major actors—the academy, industry, and NGOs.

If we look at academia, Burgr pointed out that the Prague department was “the only faculty during the [socialist] regime” doing media research, and it was later transformed into its current shape. The field was also developed in Olomouc, the first department to teach journalism in the Czech Republic, Brno joined later on.

The initial trend affecting the development of media reflection was explained as “Westernisation” by Academic 1: “There are two important influences at the beginning—Westernization and the effort to resist it, completely in vain.” That may have taken the form of an international development program funded by the Council of Europe, where Western European universities advised Prague-based journalism academics on how to create a relevant curriculum (Osvaldová and Šmíd). Ironically, this was labelled by Academic 1 as “the development programme for the humanisation of Central and Eastern Europe.” Later, Westernisation was manifested in the publishing of translated textbooks and dictionaries (Jirák and Academic 1). Academic 1 labelled this time as a “period of textbooks.” Jirák adds: “Quite logically, we turned abroad, and the first steps were the translation of literature....But it had one huge disadvantage...that it still suggests to students today that knowledge about media is universal.”

Scholarly research publications were scarce: rarely written by foreign researchers (e.g., Wachtel, 1996) continuing with the Westernized point of view brought to the local reflection. On the other hand, the work published by Czech authors was rather descriptive (e.g., Jirák, 1997; Kaplan & Šmíd, 1995) and did not include relevant data to allow for a meaningful reflection on media. Interestingly already during this period, Czech academics participated in foreign data collection on post-socialist media systems for foreign grants and the EU. These were much better funded and had more stable financial sources than research in Czechia (Šmíd).

For the industry, the most important actor in the media sector was the Publishers’ Union, (founded in January 1991), which initiated the beginning of media data collection in the Czech Republic (Industry Representatives 1 and 2). However, less and less of the data entered the public sphere and it was only available to paying customers.

The development of a civil society and the related emergence of non-profit organizations was still in its infancy in the early 1990s. Nevertheless, the Centre for Independent Journalism, which was founded by Americans, contributed to the development of the local field by educating journalists and publishing two publications (cf. Westernisation) that focused on the basic normative assumptions of democratic journalism (Boyd, 1995; Mallette, 1994).

The first period was, thus, a search for a way to adopt foreign models which brought its own challenges as mentioned above. The collection of relevant data and analysis was uncommon, which may be related to the speed of the changes and the inability to get a wide enough perspective for meaningful reflection. At the same time, there was a strong emphasis on the evolving teaching of journalism at universities (Burgr), which meant less time for research and nascent research funding (the Grant Agency of the Czech Republic was established in 1993).

## **5.2. Searching for Direction Era**

After the first decade of development, the second period of stabilization—that we coined as searching for direction—followed between the early 2000s and 2010. The Westernization trend continued, with the

hegemony of foreign reflection until approximately 2010, after which Czech actors started to produce their own data.

In academia, foreign authors established a more systematic reflection on Czech media (e.g., Gross, 2002; Gulyás, 2001; Jakubowicz, 2007). Interviewees depicted this period in two ways. One was as a “period of hunches and despair” when “we knew there was research and a scholarly article, but we didn’t know how to do it, and there was a lack of connection with the international academic community” (Academic 1). The other was as a “period of original Czech textbooks” that “was essentially a retelling of foreign sources. What was not much there, or rather appeared only marginally, were the original texts on the Czech situation” (Jirák). These original data about the Czech media were mostly theoretical and descriptive (e.g., Köpplová & Jirák, 2001; Šmíd, 2004). The situation was deemed critical enough that *Media Studies*, a domestic media studies journal, was established in 2006. Academic 1 describes the establishment of the journal, which was to be a platform for the academic field’s criticism, as the product of frustrated academics in an era of desperation. The journal editors formulated the need for research and data-oriented texts (Macek & Reifová, 2008).

This period is also the beginning of the gradual divide between academia and the industry, both in terms of the approach to data gathering and data openness. The academy had slowly established itself and continues to be small and further threatened by tensions between the practical field of journalism and the “proper academic field” of media studies (Orság, Burgr, and Jirák). Contrary to this, industry research produced systematized and continuous data. However, they became monetized and inaccessible (Industry Representatives 1 and 2).

The NGO approach to development was similar to that of academia. The foreign-funded actors gradually withdrew (e.g., the end of Centre for Independent Journalism in Czechia) and a network of Czech NGOs focused on media and communication was established (e.g., People in Need with the One World in Schools project). However, NGOs started to substitute for the inadequacies of the media reflection of other actors and the state. An NGO representative speaks about a “big failure” of the system, as both the state and academia have been insufficient in offering relevant data: “As a nongovernmental organisation, we felt, and still do...that the state does not fulfil its obligation in media education...In 2005 we saw the unpreparedness...to teach media-related topics and...the breath-taking illiteracy of young people...and we took it as a challenge” (Strachota).

### 5.3. *Everything, Everyone, All at Once Era*

The third period (starting in 2010) is ongoing. We coined it everything, everyone, all at once. On one hand, it is typical by its boom of empirical research “on all fronts” and, on the other, it has high thematic fragmentation. Instead of media research becoming more systematized and thematically coherent, a topical disintegration took place and made the field ultimately opaque.

In the academic field, Academic 1 labels this “a period of demands—a rigorous science assessment system on which university funding was based.” Jirák sees two sides. There is a positive development: “It was a period of, let’s say, a partial victory. The topic was established, and the interest of experts from various fields in the media was obvious but not very enlightened sometimes.” And there is also fragmentation: “I can’t help but see that the contours of the field, which were given primarily thematically, not methodologically, are dissolving a bit into such a vagueness.”

With regards to topical fragmentation in academia, the current Institute of Communication Studies and Journalism at Charles University, Prague, mainly covered theoretical and descriptive work with a focus on general information about the media landscape, history, and the post-socialist transformation of the media. Only later did researchers begin to reflect on political communication, media literacy, etc. The Department of Media Studies and Journalism at Masaryk University, Brno, established itself (after 2010) in audience research. The core research also reflects on media history, journalistic professional roles, and local journalism. The last player in the academic realm—the Department of Media and Cultural Studies and Journalism at Palacký University, Olomouc—manifests more of a theoretical approach, with dominant topics in history and media literacy in recent years (cf. Jirák, Burgr, and Orság).

The industry approach to gathering and analysing data developed similarly in terms of the non-openness of information and the strict commercialism, but the individual media (not only the umbrella organisations, like the Publishers' Union) collect data gradually, independently, and longitudinally (Industry Representatives 1 and 2). Nevertheless, the Syndicate of Journalists has failed to reflect the field in a relevant way since the early 1990s (Jirák, Burgr, and Osvaldová). The dispersion of the Czech media system after the change of ownership structure (see Section 3) led to the creation of the NGO Foundation for Independent Journalism in 2016, which started to critically assess the quality of Czech media.

NGOs continued their parallel but only scarcely cooperated with other actors in media data gathering and analysis. To sum up, we observe two trends to be closely related to the potential emergence of data deserts, which characterize the third period: dispersed topicality and accessibility, and the related lack of cooperation.

#### **5.4. Data Deserts as a Symptom and a Consequence**

The data we analysed, came from three different areas—academia, the media industry, and NGOs. This material clearly highlights specific topics and reveals data deserts created by certain focuses. The academic publications were narrowly aimed at analyses of the media system in the Czech Republic, journalism education, journalists, and journalistic work. This was a direct result of the expertise of the academics working in the three main media studies and journalism departments. This, inevitably, influenced the student theses, contributing to the hegemonic topical venues of academic texts.

The dispersion of data topics leads again to the growing importance of foreign observations of the Czech media, which offers “the big picture” and a longitudinal approach with comparable data (e.g., Reporters Without Borders, European Federation of Journalists, and The Reuters Institute for the Study of Journalism).

With regards to accessibility, peer-reviewed and indexed articles are readily available and obtainable, but books, chapters, or reports are usually not. The accessibility for industry/business material is almost non-existent (with few exceptions, like data from the Czech Statistical Office). Most often, the material is behind a paywall, while freely accessible documents vary in quality. This problematic system for accessing scholarly or business data poses questions about how many documents from the researched period truly exist and how successful one can be in collecting all the relevant data.

Previous information highlights yet another problem—varying data quality. It is impossible to identify a systematic strategy for both the academic field and the industry because of the deep thematic

fragmentation that was created by the individual interests of the workplaces. A side effect of this fragmentation in such a small academic field is that the coverage of fundamental disciplinary themes is not saturated.

Related and repeatedly pointed out mutual non-cooperation for data gathering and analysis is one of the foundational layers of the development of data deserts (cf. data openness). Understanding the media market as a competitive environment warrants the notion that not all information can be available. Still, the level of non-collaboration between academics and analysts (except e.g., public service media) is alarming. This leads to having only descriptive and mostly unavailable data. Other interviewees label the non-cooperation and fragmentation in such a small industry as problematic and they point out that foreign countries are more connected (Industry Representatives 1 and 2, Strachota, and Orság).

Others, however, observe that the collaboration between academics and praxis happens in the pedagogy. Burgr notes that many professionals (i.e., journalists) want to share their know-how. On the other hand, the same people do not believe that a scholarly reflection of the profession can ever capture the “real deal” and enrich either actor. Kubíčková argues similarly: “It is a problem of the praxis, when I read your studies....I can say they did a nice job, but it does not work inside of the industry.”

It is obvious that the creation of data deserts in the Czech Republic has two forms of development that follow the evolution of the field itself. While the emergence of data deserts in the first two periods relates to the absence, or more precisely (non)existence, of locally produced data, it is caused by different aspects later on. What begins in the second introduced era and continues to the present, is the diminishing of accessible data from the industry actors which is reinforced by the topical fragmentation of the academic field. Both inaccessibility of existing data and hegemonic “academic topicality” causes crucial themes to not be properly addressed (or at all) thus once again leading to the emergence of spatially and temporarily specific data deserts.

## 6. Conclusions

In our article, we aimed to answer these research questions: What is the availability, continuity, and accessibility of the data about media in the Czech Republic between 1989 and 2020? What is its format, and who are the producers? Our findings show a timeframe with three consecutive periods that we coined to characterize each. The three periods reflected the societal changes and, in a way, followed the earlier introduced periods of post-socialism, transition, and post-transition societal development after 1989. Our overview of events taking place in each period provides a clear look at the delayed reflection of the development of Czech media, not only from the academic field but also from other actors (i.e., industry and NGOs), even though their situation was more complex.

Working our way through the areas of availability, accessibility, and continuity, we see that all those areas are problematic and partly responsible for the creation of data deserts. Availability of the sources was scarce until the third discussed era. Until then, research was supplemented by foreign researchers which ultimately meant that both the establishment and the reflection of the field were intensively impacted by Western influences. While in 2010 there was a boom of original Czech research in many areas of the media field, the non-cooperation and impermeability of the research among the crucial actors (academia, industry, and NGOs) caused impaired availability of the sources in the field. This is directly influenced by the worsened

accessibility of certain sources, and their varying quality caused by the inability to cooperate but also by restricting the data behind paywall as was the case of industry materials.

Continuous data are rather scarce. They either exist as a part of bigger international projects (e.g., Worlds of Journalism) or they belong to the (often unavailable) industry area (e.g., readership and viewership). As a result of all discussed, and obviously risk-related, issues, the development of the field led to the creation of data deserts with high intensity of topical fragmentation.

This situation may have serious implications for the normative level of the field (Strömbäck, 2005). The lack of interconnectedness of the data sources or the absence of certain segments of research makes it harder to test and contextualize the principles used to evaluate media performance in a particular national setting adequately empirically. This could be illustrated by the absence of empirical studies in the field of media evaluation in our sample. Under such conditions, not only media studies, journalists, but also policymakers may rely on normative categories imported from other cultural and historical settings, especially the West. Thus, the existence of data deserts puts an obstacle to the de-Westernisation (Curran & Park, 2000) of the field and makes the internationalisation of research, i.e., interregional cooperation, which is desirable in this respect, especially in the CEE region (Demeter et al., 2023), more difficult.

In summary, there are several reasons behind data deserts in the Czech Republic, same as there are several ways of their emergence/creation over the analysed timeframe. Firstly, the lack of cooperation between scholars, media professionals, the industry, and NGOs. This led to insufficient coverage of the core themes in the media field and an individualistic approach for each actor to reflect upon the methodological and topical incoherence. Secondly, the creation of data deserts is caused by both the limited size of the field and the deficient financing of the actors, which creates an insufficiently competitive environment for the data to be obtainable or for a substantial professional association to emerge. Thirdly, and repeatedly, the clear hegemonic thematic venues and the lack of topical diversity and density is the direct cause of creating clearly identifiable data deserts.

### **Funding**

This study has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No 101004811 (within the project Critical Exploration of Media Related Risks and Opportunities for Deliberative Communication: Development Scenarios of the European Media Landscape—MEDIADÉLCOM). The work reflects only the authors' views, and the Commission is not responsible for any use that may be made of the information it contains.

### **Conflict of Interests**

The authors declare no conflicts of interests. The article reflects only the author's/authors' views, which do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the Granting Authority can be held responsible for them.

### **Data Availability Statement**

The data that support the findings of this study are openly available in DataDOI at <https://doi.org/10.23673/re-384> and they are part of the EU financed project MEDIADÉLCOM (<https://www.mediadelcom.eu>)

## Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

## References

- Abernathy, P. (2018). *The expanding news desert*. University of North Carolina at Chapel Hill. [https://www.cislm.org/wp-content/uploads/2018/10/The-Expanding-News-Desert-10\\_14-Web.pdf](https://www.cislm.org/wp-content/uploads/2018/10/The-Expanding-News-Desert-10_14-Web.pdf)
- Boyd, A. (1995). *Příručka pro novináře. Zpravodajství v rozhlase a televizi*. Centrum nezávislé žurnalistiky.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Coman, M. (2000). Developments in journalism theory about media “transition” in Central and Eastern Europe 1990–1999. *Journalism Studies*, 1(1), 35–56.
- Curran, J., & Park, M. J. (2000). *De-westernizing media studies*. Routledge.
- Demeter, M., & Vozab, D., & Boj, F. J. S. (2023). From Westernization to internalization: Research collaboration networks of communication scholars from Central and Eastern Europe. *International Journal of Communication*, 17, 1211–1231.
- Dobek-Ostrowska, B., Głowacki, M., Jakubowicz, K., & Sükösd, M. (Eds.). (2010). *Comparative media systems: European and global perspectives*. CEU Press.
- Gaziano, C. (1983). The knowledge gap: An analytical review of media effects. *Communication Research*, 10(4), 447–486.
- Głowacki, M., Lauk, E., & Balčytienė, A. (Eds.). (2014). *Journalism that matters: Views from Central and Eastern Europe*. Peter Lang.
- Gross, P. (2002). *Entangled evolutions: Media and democratization in Eastern Europe*. Woodrow Wilson Center Press; The Johns Hopkins University Press.
- Gulyás, Á. (2001). Communist media economics and the consumers: The case of the print media of East Central Europe. *International Journal on Media Management*, 3(2), 74–81.
- Hallin, D. C., & Mancini, P. (2004). *Comparing media systems*. Cambridge University Press.
- Jakubowicz, K. (2006). *Rude awakening: Social and media change in Central and Eastern Europe*. Hampton Press.
- Jakubowicz, K. (2007). Digital switchover in Central and Eastern Europe: Premature or badly needed? *Javnost – The Public*, 14(1), 21–37.
- Janssen, M., Charalabidis, Y., & Zuiderwijk, A. (2012). Benefits, adoption barriers and myths of open data and open government. *Information Systems Management*, 29(4), 258–268.
- Jebriil, N., Stetka, V., & Loveless, M. (2013). *Media and democratisation: What is known about the role of mass media in transitions to democracy*. Reuters Institute for the Study of Journalism.
- Jeffres, L. W., Atkin, D., & Fu, H. (2011). Knowledge and the knowledge gap: Time to reconceptualize the “content.” *The Open Communication Journal*, 5, 30–37.
- Jiráček, J. (1997). The music of change: Journalism training in Eastern Europe. In J. Bierhoff & M. Schmidt (Eds.), *European journalism training in transition: The inside view* (pp. 51–54). European Journalism Centre.
- Kaplan, F. L., & Šmíd, M. (1995). Czech Republic: Broadcasting after 1989 overhauling the system and its structures. *Javnost – The Public*, 2(3), 33–45.
- Köpplová, B., & Jiráček, J. (2001). Der Prager TV-Streik und die Auseinandersetzung um das öffentlich-rechtliche Fernsehen in der Tschechischen Republik. *Österreichische Zeitschrift für Geschichtswissenschaften*, 12(4), 136–143.
- Lee, M., & Butler, B. S. (2019). How are information deserts created? A theory of local information landscapes. *Journal of the Association for Information Science and Technology*, 70(2), 101–116.

- Macek, J., & Reifová, I. (2008). Mediální studia: když je mlčení vidět. *Mediální studia*, 3(1), 118–119.
- Mallette, M. F. (1994). *Příručka pro novináře střední a východní Evropy*. Centrum nezávislé žurnalistiky.
- Mediadelcom. (2023). *Bibliographical data of media and journalism research related to risks and opportunities for deliberative communication in 14 countries (in 2000–2020): Austria, Bulgaria, Croatia, Czechia, Estonia, Germany, Greece, Hungary, Italy, Latvia, Poland, Romania, Slovakia, and Sweden*. <https://www.mediadelcom.eu/outreach/d22-biblio-databas>
- O'Neil, P. (Ed.). (1997). *Post-communism and the media in Eastern Europe*. Frank Cass.
- Rantanen, T. (2013). A critique of the systems approaches in comparative media research: A Central and Eastern European perspective. *Global Media and Communication*, 9(3), 257–277.
- Šmíd, M. (2004). Medien in der Tschechischen Republik. In *Internationales Handbuch für Rundfunk und Fernsehen 2004/2005* (pp. 661–670). Hans-Bredow-Institut; Nomos Verlagsgesellschaft.
- Sparks, C. (2000). Media theory after the fall of European Communism: Why the old models from East and West won't do any more. In J. Curran & M. Park (Eds.), *De-westernizing media studies* (pp. 35–49). Routledge.
- Stetka, V. (2010). Between a rock and a hard place? Market concentration, local ownership and media autonomy in the Czech Republic. *The International Journal of Communication*, 4(2010), 865–885. <https://ijoc.org/index.php/ijoc/article/view/790/463>
- Stetka, V. (2012). From multinationals to business tycoons: Media ownership and journalistic autonomy in Central and Eastern Europe. *The International Journal of Press/Politics*, 17(4), 433–456.
- Stetka, V. (2013). *Media ownership and commercial pressures: Media and democracy in Central and Eastern Europe* (Pillar 1: Final report). Resource Centre on Media Freedom in Europe.
- Strömbäck, J. (2005). In search of a standard: Four models of democracy and their normative implications for journalism. *Journalism Studies*, 6(3), 331–345.
- Surowiec, P., & Štětka, V. (2020). Introduction: Media and illiberal democracy in Central and Eastern Europe. *East European Politics*, 36(1), 1–8.
- Thier, M., Jesse, M., Longhurst, P., Grant, D., & Hocking, J. (2021). Research deserts: A systematic mapping review of U.S. rural education definitions and geographies. *Journal of Research in Rural Education*, 37(2), 1–24.
- Viswanath, K., & Finnegan, J. (1996). The knowledge gap hypothesis: Twenty-five years later. *Annals of the International Communication Association*, 19(1), 187–228.
- Wachtel, B. (1996). Czech media: Democratic or anti-communist? *Nieman Reports*, 50(2), Article 51.
- Waschková Císařová, L., & Metyková, M. (2015). Better the devil you don't know: Post-revolutionary journalism and media ownership in the Czech Republic. *Medijske Studije*, 6(1), 6–18.

## About the Authors



**Lenka Waschková Císařová** works as an associate professor at the Department of Media Studies and Journalism, Masaryk University, Czech Republic. Her teaching and research focus on local media, media ownership, journalistic work, and the transition of media markets. Orcid number: <https://orcid.org/0000-0002-3307-0801>



**Iveta Jansová** is an assistant professor at the Department of Media Studies and Journalism, Masaryk University, Czech Republic. Her research focuses on audience studies, fan studies, and representations of marginalised identities in the media.



**Jan Motal** is an associate professor at the Department of Media Studies and Journalism, Masaryk University, Czech Republic. He is mainly interested in media ethics, dialogical theory of communication, and documentary filmmaking.