

WAITING FOR DATA JOURNALISM: A qualitative assessment of the anecdotal take-up of data journalism in French-speaking Belgium

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Data journalism has emerged as a trend worth of attention in newsrooms the world over. Previous research highlighted how elite media, journalism education institutions, and other interest groups all take part in the emergence and evolution of data journalism. But has it equally gained momentum in smaller, less-scrutinized media markets? This paper looks at the ascent of data journalism in the French-speaking part of Belgium. It argues that journalism, and hence data journalism, can be understood as a socio-discursive practice: it is not only the production of (data-driven) journalistic artefacts that shapes the notion of (data) journalism, but also the discursive efforts of all the actors involved, in and out of the newsrooms. A set of qualitative inquiries allowed us to examine the phenomenon by first establishing a cartography of who and what counts as data journalism. It uncovers an overall reliance on a handful of passionate individuals, only partly backed up institutionally, and a limited amount of consensual references that could foster a shared interpretive community. A closer examination of the definitions reveal a sharp polyphony that is particularly polarized around the duality of the term itself, divided between a focus on data and a focus on journalism and torn between the co-existing notions of ‘ordinary’ and ‘thorough’ data journalism. We also describe what is perceived as obstacles, most of which pertain to broader traits that shape contemporary newsmaking and explain why, if data journalism clearly exists as a matter of concern, it has not transformed in concrete undertakings.

KEYWORDS Belgium, data journalism; discourse; journalists; training; innovation

Introduction

The Belgian chapter of the international grassroots group “Hacks/Hackers” was founded in 2010. As an organization, Hacks/Hackers (Lewis and Usher 2014) promotes collaborations between journalists and technologists. It is a loosely organized international network, with local informal groups—called “chapters”—free to join the organization by organizing meet-ups and other locally coordinated activities. The Belgian chapter first met in November 2010. It was an informal gathering of about 40 people in a Brussels cafe. The organizer of the meet-up, who was then the social media manager of the French-speaking public broadcaster, declared the event a success, attended by “mostly hackers but with a strong representation from national media.” A short report on

the event on the Hacks/Hackers website further announced two outcomes: a soon-to-be hackathon and the launch of an “open data effort,” namely a shared list of “URLs of open databases in Belgium and Brussels.”

The list was not updated after its ninth entry, and the hackathon never took place. After a couple of additional meetings jointly organized in 2011 with another, similar grassroots organization called HackDemocracy, what remains of Hacks/Hackers Brussels is its Twitter and Facebook feeds, sporadically updated with news about journalism and technology. “It was too early,” reckons the founder of the chapter when asked about the demise of the group (T16¹).

The Belgian chapter of Hacks/Hackers seems to embody the current state of data journalism in French-speaking Belgium: a couple of well-connected individuals generate enough enthusiasm to raise interest within the (small) media community, but the initial impetus fails to develop into a sustained momentum or any large-scale project. Yet, this is not to say that data journalism didn’t make it to Belgian newsrooms. This article seeks to assess the existence of data journalism in the French-speaking part of Belgium by tracing the nascent practices and discourses that a diversity of actors are articulating inside and outside the newsrooms. Results show that a collective, polyphonic discourse about data journalism is identifiable among journalists and media managers, but so far it has not developed into stable, systematic practices. Understanding the modes of discursive construction of data journalism (who is speaking about it, from what position, how it is conceptualized, and what activities are associated with it), sheds light on the modes of existence of this emerging news practice. Our analysis explores these dialectics between discourse and practice by tracing a small network of professionals, newsrooms, blogs, and training and funding institutions.

Gauging the Ascent of Data Journalism In and Out of Newsrooms

To document the fact that data journalism is a significant phenomenon, scholars have pointed at various signs denoting its importance and have argued that there is a convergence of indicators, both inside and outside news organizations. The first, most obvious indicator to look at is media organizations themselves: how much do they engage in the production of data journalism? Most studies supply evidence of the ascent of data journalism by relying on prestigious cases in point: that of “elite” newsrooms (Anderson 2012), such as *The New York Times* or *The Guardian*, that have produced widely discussed examples of data journalism. Beyond these prestigious examples, evidence that data journalism has become widespread across newsrooms is mixed, depending on the country and the context. Some witness a rather modest ascent, with signs that only a few newsrooms produce data journalism in Norway (Karlsen and Stavelin 2014) or that data journalism is still “fairly uncommon” in Sweden (Nygren and Appelgren 2013). Others seem to witness a more sustained trend, such as in the Netherlands, where several “prominent media organizations” produce some sort of data journalism artefacts (Smit, De Haand, and Buijs 2013).

Beyond the sheer description of how news organizations engage in the production of data journalism, scholars have also looked at the various aspects that could explain how this production is shaped. Many such inquiries are focused on the news organizations themselves but tackle the issue at different—interrelated and complementary—levels: from the broad economic issues to work dynamics and even

individual-focused analyses. In his call for a “sociology of computational journalism,” Anderson (2012) distinguishes different analytical lenses to approach the phenomenon, among which a focus on economic and organizational logics. Other studies similarly embrace the need to study the organizational level of newsrooms but also insist on understanding the “moving cause” (Karlsen and Stavelin 2014) of data journalism—that is, the people producing it. Empirical research has hence been carried out at an individual level, particularly addressing the skills, self-representations or professional trajectories of news workers (Smit, De Haand, and Buijs 2013; Parasie and Dagiral 2013). The question of the skills required to produce data journalism seems particularly crucial, with findings underlining the need to master skills at the intersection between journalism and technology (Karlsen and Stavelin 2014). Trédan even suggests that there is no such thing as a data journalist—i.e., one person with a complete mastery of journalistic and technical skills—but rather a converging set of insights that allows newswriters to take part in cooperation between professional actors from distinct worlds (2014).

But relying solely on a newsroom-centric perspective falls short of accounting for all the actors potentially involved in the production of data journalism. Key actors outside of the newsrooms also play a role in the development of data journalism. Among them, at the intersection between the social worlds of technology and traditional journalism, we find for example actors such as the grassroots organization Hacks/Hackers or non-profit-making funding bodies such as the Knight Foundation that encourage projects mixing technologists and journalists and hence become instrumental in the emergence of a computational journalism culture (Lewis and Usher 2013).

Within the non-newsroom-centric perspective, we also find research that has focused on the *data* itself, or what Karlsen and Stavelin (2014) call the “material cause” of data journalism. The existence of data, as the raw material of data journalism, is not a given. On the contrary, data is at the core of political power struggles—illustrated by the importance played by open-data advocacy groups in how data journalism sometimes comes to the fore (Trédan 2014)—which emphasizes the necessity to study the “bureaucratic, policy-level initiatives that either allow computational journalism to thrive, or retard its growth” (Anderson 2012). Besides, data itself can be messy, forcing the journalists who work with databases to reconsider the epistemological ground on which they operate (Parasie, this issue).

Finally, non-newsroom-centric perspectives also emphasize the role played by the wider cultural background in defining what counts as journalism. Along that line, the role of journalism education has been underlined as significant: the fact that a number of institutions active in journalism education have started to offer programs in data journalism is pointed by several authors as a significant sign that data journalism is gaining momentum (Anderson 2012, Lewis and User 2013, Trédan 2014)—and has been documented in the past to show how comparable trends, such as computer-assisted reporting, have been adopted both in newsrooms and in classrooms (Davenport, Fico, and DeFleur 2002).

Does Data Journalism Matter?

In order to assess whether data journalism exists in French-speaking Belgium, we adopt a perspective that rises above the dichotomy between discourse and materiality.

In line with Cooren, Fairhurst and Huët (2012, 296), this perspective assumes that “analysts do not actually need to keep turning in one direction or another, that is, choose between materiality and discourse, so to speak, but that they should rather focus on the multiple ways by which various forms of reality (more or less material) come to do things.” As such, our aim is to minutely describe the materiality of data journalism in a context where there is almost no data journalism that is actually produced—arguing that it is not because there are no artefacts that data journalism does not matter in Belgian newsrooms.

Journalism does not solely exist in the news that is produced, but also in discourse—discourse that is not just another symbolic layer placed on top of practices and news artefacts: practices and discourses exist in a mutually shaping relation. We consider journalism as a socio-discursive practice. As such, journalism has its own “conditions of possibility” that determine what constitutes the realm of possible speech, action and performance. Such a perspective concurs with the conceptualization of journalism proposed by Zelizer (1993), as being an “interpretive community” that is discursively shaped.

The crucial question then becomes: where can we locate journalism as a discourse? Scholars have produced in-depth analyses of privileged loci of discursive production, drawing on discourses produced by institutions or organizations that are relatively stable such as journalism unions (Ruellan 2014), the gradual constitution of professional organizations (Le Cam 2009), metajournalistic discourses as they are expressed in trade journals (Powers 2012). Journalism as a socio-discursive practice has also been increasingly characterized as fundamentally “dispersed” (Ringoot and Utard 2005) and heteronomous. Hence, exploring the discursive production of journalism in a centralized, institutionalized space (such as a limited scope of traditional news organizations) is no longer satisfying: we need to “go beyond the usual suspects” (Anderson and Fink, forthcoming) and trace “news networks” constituted by a variety of actors (Domingo, Masip, and Costera Meijer, forthcoming).

That is exactly the approach that we use to unpack the notion of data journalism: not as a technology that needs to be adopted, or as a taken-for-granted existing practice (which is currently only relevant in a handful of elite news organizations)—but rather as something that materially and discursively exists in a fundamentally relational space, across organizations, outside of news organizations, and even probably across national contexts. In that regard, this study is an “inquiry,” as conceptualized by Latour (2005, 2013), that traces the liaisons between humans and nonhumans and seeks to account for the heterogeneous nature of the phenomenon.

In other words, the hypothesis we propose is that data journalism could exist as a discourse (re)appropriated by a range of actors, originating from different—and sometimes overlapping—social worlds. If we look beyond the output—i.e., the data journalism artefacts that are produced—we can argue that at least part of what is considered as forming the contemporary trend of data journalism mainly operates in the realm of discourse. Organizations such as Hacks/Hackers or NICAR, for instance, do not primarily produce data journalism artefacts (unless they engage in the organization of hackathons or similar events): they produce discourses promoting and legitimizing the idea of data journalism, thus encouraging and enabling data journalism initiatives. Conferences and meet-ups are not only an afterthought to the production of data journalism, but rather they are the discursive matter that makes it come to existence. As

such, we argue that gauging the existence of data journalism by only looking at the actual production of artefacts falls short of understanding how the phenomenon is shaped. We also need to examine how it is appropriated, re-appropriated and interpreted as a discourse. Our guiding research question is, therefore: How does the plurality of discourses and practices around data journalism mutually shape the concept and its development in French-speaking Belgium?

Method

Instead of taking the phenomenon for granted, we choose to assess its existence in discourse. Starting from a set of points of entry, as suggested by the multiple indicators discussed above, we qualitatively track the existence and the nature of data journalism in the particular context of the French-speaking part of Belgium.

The core of our methodological strategy was twenty semi-structured interviews with a diversity of actors representing the different profiles involved in the adoption and development of data journalism, including journalists in newsroom managerial positions (editor-in-chief and similar); persons managing human resources in the media companies, in charge of organizing journalists' training; people in organizations that propose trainings in data journalism (among other professional or educational activities); trainers; and journalists practicing data journalism (most of them involved in training workshops, either as trainees or as trainers). The interviewees were selected in a snowball process: starting from a list of people who had attended a training session on data journalism organized by the association of professional journalists in June 2013, we then added the people they named during the interviews. When we met journalists employed by news organizations, we also sought to meet people in managerial positions from the same organization.

The aim of the interviews was to assess the existence of data journalism from the point of view of our interviewees, to collect the diversity of definitions of data journalism, to understand how their discourses materialize the phenomenon, and how organizational and personal aspects motivate or constrain its development as a news practice. We analysed the interviews to find common themes, and systematically traced the references made by the interviewees to persons, institutions, and technological tools—in all, forming a landscape of 168 relevant actors connected through a network of 309 interdiscursive connections.

Beside this material, collected in the autumn of 2013 and winter 2014, we also gathered and analysed 52 documents: detailed programs of the trainings, blog posts about data journalism, as well as the occasional data journalism artefacts. The authors of this article have also taken part as participants in some of the events of this history (e.g., Hacks/Hackers meetings and data journalism workshops), which provided an informal form of observation.

The French-speaking Belgian media market provides a privileged case for the study of the adoption of innovations in journalism, avoiding the usual fascination of researchers for the early adopters and the best-known outlets. The small size of this media market (4.5 million inhabitants) allowed the authors to reach most of the key actors (i.e., a census more than a sampling) and consider all the facets of the phenomenon.

What Data Journalism is Made Of

The interviews were rich in references to people, institutions, and tools involved in the development of data journalism in the francophone part of Belgium. These references indicate who or what populates the notion of data journalism for the people we met: their discourses call up a set of actors—be they technical tools, influential people, funding bodies or famous examples. Tracing these references allowed us to determine who or what counts as a relevant actor, and to subsequently recompose the discursive landscape of data journalism in Belgium.

Even though our methodological choices (starting with journalists who followed training in data journalism) certainly implies a bias that might overemphasize the importance of the phenomenon—if there are trainings, data journalism must be something that exists—our interviewees were extremely cautious in assessing the actuality of data journalism in French-speaking Belgium, especially when trying to determine who could be considered as a data journalist: “It’s extremely limited (...) I wouldn’t say there’s nothing at all, because some people try to, but I’m thinking of three people. That’s it” (J14). Another one insisted on this idea: “[W]e are talking about [data journalism], some of us are talking about it. But few really put that into practice. And it’s mostly individual initiatives, emerging from the will of some journalists who decide to invest themselves in that” (J9).

In their description of who and what counts in the notion of data journalism, respondents also attributed authority and know-how. Most interviewees name the same two specific journalists (JT11, JT12) as the first (and only) professionals to produce data journalism stories in Belgium. They are seen as the only local experts in data journalism, and their expertise has led them to be asked as instructors in data journalism trainings. Another sign of the vaporous existence of data journalism appears in the fact that other people are also designated as experts, even though—as they willingly admit (J13, T16)—they never really practiced or produced data journalism. The founder of the local chapter of Hacks/Hackers and self-proclaimed “digital sherpa” as well as an “editorial webmaster” well-known for his digital literacy, both involved in training sessions (as organizers or instructors), appear as key actors that have distributed and promoted the idea of data journalism in the past few years. At the other end of the spectrum, two journalists (J14, J15) who turned out to be extremely knowledgeable about data journalism (mobilizing many tools, actual experiences and references in their discourse) were only rarely mentioned.

While the handful of pioneers are self-trained, most of their colleagues fiddling with data journalism in Belgium have been initiated during training sessions, and deem them crucial to get to know the basics and the tools to practice it. Still, even those who organize trainings (X19, JX20) were cautious: “At our first initiation training, we had only six people. That shows that the interested audience, in Belgium, is extremely limited. (...) There must be about 30 people in total, who are interested enough to follow training sessions, for now” (JX20).

Institutions also matter in the data journalism landscape, according to our respondents. Training sessions are, in some cases, initiated by media companies themselves—in a generic effort towards lifelong learning that goes beyond the sole practice of data journalism and embraces many other aspects of contemporary newsmaking—or by other stakeholders such as the organization of professional

journalists (AJP) or by the trade association of newspaper publishers (JFB). Some journalism schools take part in the movement by acting as external contractors that deal with the logistics of the trainings (when solicited by the association of newspaper publishers, for example), but the topic does not seem to be part of the permanent curricula offered to journalism students so that schools often call on external instructors. Another example of institutional support is the fact that a foundation fostering investigative reporting in Belgium has received three applications for projects involving data journalism. However, the projects were subject to jurisdictional doubts, and the initiative's promoters (including the director of the foundation) had to struggle to convince the foundation that it was legitimate (JT12, X18). Ultimately, of three proposals that "contained some elements of data journalism" (X18), one was funded.

Data sources were also present among the institutional actors that matter, but they are mostly framed in a negative way: respondents complain of a lack of data sources (barely the national institute of statistics and its European counterpart). Strikingly, the diverse open-data initiatives showcased in the last few years by various governmental bodies (at the level of the European Union, the federal state of Belgium, the Walloon region or the city of Brussels) are rarely mentioned (T16, J14). They do not seem to matter in the imagined landscape of data journalism. Journalists agree that the European Union (Eurostat in particular) is a much more accessible source of data than the national authorities, sometimes even for information produced by the latter, but with insufficient granularity to zero in on the local.

Some news organizations were also among the actors that count in so far as they constitute examples of good practices. Some Belgian cases related to fiscal scandals involving the bank sector are mentioned, but rarely. Foreign news organizations, however, appeared as exemplars: *The Guardian* and specifically its Datablog is a source of inspiration for many of the interviewees. Other big newsrooms like those of *Le Monde* or *The New York Times* are also mentioned, mainly to point out that the resources available in Belgian news media are no match.

Our overview of the network of actors that participate in the construction of the notion of data journalism, according to the interviewees, reveals that there is a handful of consensual actors which are often mentioned: the two journalists who are known for producing data journalism, the organization that hosted the trainings (our starting point), as well as the tools that were the topic of the said training session (Google Fusion) or foreign examples of news organizations successfully producing data journalism (*The Guardian*). Conversely, the majority of actors—people, tools, organizations—are only mentioned once: they populate the notion of data journalism for one of our interviewees, but these references are not necessarily shared. The "interpretative community" is, therefore, dispersed, fluid, and mostly unstructured, despite the efforts of some central actors.

The Vague Contours of the Definitions of Data Journalism

The very notion of data journalism shows a remarkably wide range of meanings among our respondents: despite the fact that there are themes that connect the diversity of discourses, there is no consensus on core issues regarding the definition of the phenomenon. Definitions stem from examples, experience, and discourses heard, appropriated and sometimes reinterpreted. Variations in the perception of data

journalism seem unrelated to whether the respondent is a journalist, a manager or a trainer but rather to how close they have come to the practice of data journalism. The extent to which respondents share representations of data journalism stems from the depth of their understanding of the corresponding practices or of the experience of seasoned data journalists. The participation of some of the interviewees in workshops seemed to foster closer points of view than with the other respondents.

Before any attempt to define the practice, to refer to examples, to try and incarnate the phenomenon, the idiom *data journalism* can be seen as concentrating a limited number of strong features. It appears to be orienting, if not dictating, the definitions that are offered. These meanings focus primarily on two main features: the data themselves and journalism. One journalist says it upfront:

The way I see it, ultimately, is with both words: there is data, and there is journalism. Journalism is the daily job of the journalist, seek information, check it, possibly analyse it, criticise it if need be. The exact angle is the data, it's starting from the data, be they numbers or not (J10).

This position highlights the extent to which respondents hang on to the very terms or how they distance themselves with their meanings. Along the same lines, a few respondents who emphasize the journalism component like to insist that data journalism is essentially just journalism.

I see neither opposition nor real specificity between journalism and data journalism (...) I really think it's something that has always existed and it has been thriving thanks to new technologies (MJ2).

The term would be a new terminology used to designate a reality that pre-existed, a "return to the fundamentals in a modernized form" (MJ4). The practice would be predating, journalists having consistently worked on the basis of data (J9, MJ4). Obviously, all focus narrowly on the term *data*. Doing data journalism implies to "process data" (JT12), to access it, to correlate it and finally to present it, but also to do a form of data-seeking journalism (MJ4), or even a way to use databases (M6, MJ3, MJ1). Between journalism and data, the emphasis is often techno-determinist, with references to the tools and to modes of access to the data. Progress in tools and technologies would allow easier access and processing and would make data journalism more natural in the context of euphoria associated with new technologies. Existing data are seen as easier to access (at least in the imaginary, not so much in practice), and the tools available are perceived as potentially facilitating a more complex form of journalism. But while some respondents frame data journalism in relation with pre-existing practices, others praise the explanatory power of the numbers, of the importance nowadays of data made available using new technologies (JT11, JT12, MJ3, J9). The emphasis on techniques is even present within expressions of scepticism: "What's new isn't so much data journalism, but rather the method that allows us to cross-tabulate data on a large scale" (MJ2). Computers and data processing are often mentioned either as progress or as an impediment when doing data journalism.

These perceptions are consistent with broader trends in the perceived effects of the internet on the media (Rebillard 2007). Respondents, however, often see

opportunities in data journalism that, ultimately, would offer a potential to, in a way, improve journalism in general. This positive effect would result from an improved capacity to investigate. It encourages to “investigate by numbers” (JT11), it is now one of the forms of investigative journalism (MJ2), and it makes it possible to “reveal information that didn’t exist (...) to reveal information from raw data” (J8). If many respondents underline the revelatory potential of data journalism, its capacity of showing what is hidden, the emphasis is again either on the data or on the journalism end of the spectrum. Some argue that it is the data themselves that allow to “bring governments to their knees” (J15) and to gain independence from official channels (J10, MJ4); others argue that showing what is hidden and holding those in power accountable is what journalists have always done—with data being yet another instrument in the toolkit of investigative journalists (X18).

But these optimistic opinions are counterbalanced by views critical of desktop journalism, thus defending a model of journalism where journalists go into the field. An editor insists:

Data journalism is nice, but it’s not life. Yet, by doing our job as journalists, we must tell life as it happens. And it’s not enough to stay behind one’s desk with a computer, one must go out into the field. Check if the data that you have is for real. You will not tell people, on television for example, that life expectancy is 70 without going out to see old people (MJ4).

Respondents are also swept along by their perception of the inevitability of technological change and the race for innovation within the media industry. Data journalism is clearly associated with innovation among some editors who then anchor their definition within the image of novelty associated with it (X18). Data journalism remains, for some, a way to make news more “sexy” (J8, M6, MJ2), to prefer forms of visualization that impress, intrigue or entertain by their design, and so help explain complex stories or illustrate not very visual ones. But data journalism is one of many ways by which news organisations struggle to maintain their footing in a market in transformation. It is sometimes explicitly given a rather low rank among those priorities by editors who admit that “there is a billion other priorities” (MJ2), particularly when they feel that the return on investment for the training of journalists is debatable (MJ4, J9).

Ordinary Data Journalism

As respondents progressively come up with definitions, another division appears to shape what counts as data journalism in Belgium. There is, on the one hand, “ordinary” data journalism and, on the other hand, “thorough” data journalism. They are characterized by contrasting traits: the former is manageable by one individual, can be done on a daily basis, and can be included in the existing routines of news organizations if journalists master specific tools. The latter is eminently collective and demands the mobilization of a range of skills (journalism, computer science, statistics, graphic design), necessitate more time, primarily requires that news organizations completely rethink their workflow, and is more a question of “mind-set” than a question of mastering new tools.

In that regard, the notion of data visualization appears as strongly divisive and tends to shape prominently what counts as data journalism and what doesn't. Some dismiss the emphasis on visualization as a simulacrum of data journalism: "They think they do data journalism because they produced a graphic (...) That is not data journalism. Data journalism means to retrieve data that are not given, and process them. Visualization comes at the very last stage" (J14). Others, however, argue that producing data visualizations is an integral part of the storytelling skills that are essential to good journalism (J6), and that the "ordinary" approach has merits: "People often seek extraordinary examples of data journalism. The glitter, the dream (...) but I think data journalism can be banal. (...) Maybe to ultimately produce an unsophisticated graphic" (JX20).

Such distinction consequently complicates the question of the existence of data journalism in French-speaking Belgium, as respondents are very self-aware of the scale of what is produced: they for example acknowledge the know-how of the two local experts while admitting that what they do is "fairly basic" (MJ5, J13, JX20). As with the cacophony of definitions, every respondent's position on what really counts as data journalism depends on their knowledge, experience, and relative proximity to the practice rather than their role (editor, journalist, trainer). This increases the complexity of the collective discourse about data journalism and fosters the diversity of practices labelled as data journalism despite their disparity.

The Long Road to Data Journalism: Perceived Obstacles

When it comes to identifying obstacles to the practice of data journalism—or the transition from "ordinary" data journalism to "thorough" data journalism—respondents offer arguments that fall within three categories: obstacles within the news organization, obstacles outside the news organization, and obstacles that emerge at a more individual level.

The bulk of obstacles seems related to how news organizations function, with specific material constraints, be they in terms of time, resources or workflow. Time, or the lack thereof, emerges as one of the main barriers to the practice of data journalism. Some respondents frame time as something that the organization refuses to give to journalists (M7) because it has other priorities, or admit that their practice of data journalism is confined to their free time (J9, J8). One journalist who has successfully engaged in the production of data journalism projects emphasizes that convincing his hierarchy to give him some time was a key enabler (JT11).

The question of time also ties in with that of the news cycle. Especially for those working in news organizations that primarily produce a daily issue, the work rhythm is such that taking the time to dig into a database is often impossible (J10, MJ1, M6): "The problem with producing a daily is that we are caught by the news, every day" (J9).

Data journalism projects are even further hindered by the fact that their return on investment seems feeble, uncertain, or plainly fruitless (M7, JT11, J10).

We can spend days on it, without results (...) By cross-tabulating different databases, one might come up with a scoop. But it happens one time out of ten. It requires a lot of time, without immediate or systematic results (M7).

A freelance journalist directly connects this issue with his conditions of employment and financial pressure: “If I stop for one day or two to analyse the data... It will bring nothing in, the work won’t get paid for: only the article will get paid for” (J10). The financial resources available are also one of the organizational barriers. News organizations operate on a tight budget (J9); they do not devote enough resources to the hiring of skilled designers or developers or to the purchase of new tools that could produce better data visualizations (JT12).

Finally, the workflow and division of labour in traditional news organizations is also pointed out as an organizational impediment to the practice of data journalism. Here, the role of graphic designers and their collaboration with journalists comes forward as a major issue: either in terms of division of labour, or in terms of availability. Journalists who engage in the practice of data journalism worry that they are “doing the job” of the graphic designers when they produce data visualization (J10), or wonder if they really want to learn more design skills, as they primarily think of themselves as journalists and not designers (J9).

The availability of graphic designers to work on data journalism projects is also an issue (M6, JT12), especially when the development of data journalism is not encouraged by the organization: “If they [the graphic designers] are not personally excited by the project, they are not going to work on it. It is not a priority” (J9). In one of the newspapers, the role of graphic designers was explicitly linked to creating visualisations, which were considered as an “embryonic” form of data journalism, and explicitly promoted and channelled through the central desk coordinator in the newsroom.

Obstacles outside news organizations converge towards one shared concern: the availability and usability of data. All the interviewees agree that public institutions in Belgium still needed to fully embrace the policy of open data that they often claim to subscribe to. Overall, the access to public data is deemed extremely difficult (JT12, J9, MJ1). When datasets are available from public institutions, they are either out-dated (MJ4), they are not produced in a timely fashion (MJ1), they do not offer enough granularity to be useful (JT12, JT11), or are not available in a format that would be directly usable (J10). When explaining this situation, however, the interviewees did not blame public institutions for their blatant unwillingness, incompetence or secrecy. Instead, they highlight structural problems—such as incompatibility between the different systems used by subparts of the administration and the transition from paper to digitized data (J10), an overall lack of a “culture of transparency” (J9), and the “old habits of the administration” (J8). “We’re in the medieval age of statistics,” one respondent (J10) summarizes.

Respondents seem aware—if vaguely—of the legal obligations that administrations have to publicize data, but to their knowledge, no journalist or media organization has ever attempted to use legal means to obtain data from a public administration. The only journalist (JT12) that ever considered doing so admits he quickly gave up because he felt too isolated, because his request for setting up structural support in his news organization never resulted in concrete measures, and because a lawyer told him that the data he was requesting were protected by privacy laws (and would therefore never be accessible).

Respondents also highlight obstacles at an individual level: they argue that most journalists are afraid of numbers (JT11, JT12, J9) and hence are deterred by the tools and raw material of data journalism. Journalists tend to display a literary sensitivity (J9);

their personal taste implies that they prefer to write rather than process data and numbers (MJ2). This overall distaste is privileged over an explanation that would emphasize the technical difficulty as a main obstacle: most journalists who engaged in the practice of data journalism argue that the basic tools and techniques are rather easy to learn: “Any journalist could use these tools. They know how to use a computer, it’s no more complicated than that” (J10). Even if they acknowledge that their skills can plateau out—with the most sophisticated tools requiring a lot more learning time and investment (J9, J10)—they argue that there is a mental block at play, rather than real technical impediments.

When it comes to assessing the flip side of the coin—i.e. the enablers that may facilitate the practice of data journalism—respondents mostly note one key aspect: the formation of an informal network of experts that constitutes both a supportive community and a source of technical support. Journalists who have followed training tend to say that they have difficulties to apply their new skills in their newsrooms, but one of the outcomes of these sessions has been the formation of an informal network of Belgian French-speaking journalists interested in data journalism (J9, J10, JT12, JT11). They share tips on the use of tools and their advances in applying them, with the handful of experts taking a leading role in lifting doubts. The most intriguing aspect of this network is its inter-newsroom nature, jumping over competition barriers. Journalists admitted to be more akin to the colleagues they met in the trainings than with the ones in their own newsrooms:

Strangely, there are more walls falling between journalists from different newsrooms than within the newsroom itself. As of today, I have more contact with [two other journalists from different newsrooms], via e-mail or through their blogs. (...) We exchange practical tips. It’s interesting because it’s a cooperative approach, we give each other a hand in learning the tools which would take a lot more time to discover by ourselves (J9).

The human resources coordinator of one newspaper even underline this ability to breach the newsroom walls as one of the strengths of the trainings organized by the association of newspaper publishers: “Journalists are happy to meet other people, even from other companies. They feel less alone” (M6).

Conclusions

The results presented above reveal a situation full of contrasts. News organizations have different approaches to data journalism, in terms of definition, worthiness or training. Unsurprisingly, we find such polyphony at all levels: journalists, editors, and human resources coordinators did not speak with one voice.

The definitions of data journalism themselves prove to be slippery. There is a sharp tension between each part of the doublet, *data* and *journalism*. The emphasis on *data* underlines specific challenges and needs, whereas the emphasis on *journalism* sees the idea as yet another trendy tool for doing good journalism that does not necessarily require particular attention, specific training or strong organizational policy.

The (short) history of data journalism in Belgium indicates a trend that seems to plateau at the stage of the early adopters who engage in the production of “ordinary”

data journalism, with no indication that it would evolve towards a wider adoption, let alone a mainstream practice. For those who have engaged in the concrete practice of data journalism, there seems to be an overall feeling of resignation. There might have been a brief euphoric phase after the first encounter with the concept of data journalism, but journalists who return from trainings full of ideas and ambitious projects are quickly caught again in the constraints of routinized news production. Such disenchantment is further accentuated by the lack of institutional or structural support; if news organizations do not explicitly disregard data journalism, they clearly consider it as a low priority. As a result, we see the emergence of a loose commitment and the original ambitions are revised downwards by sometimes radically widening the scope of what counts as data journalism: the production of slightly enhanced charts and visualisations (including those printed in the newspapers or displayed in televised news bulletins) counts as artefacts of data journalism, the collection of numbers (even on a small scale) or *any* piece of information qualifies as *data*.

The discourses on data journalism reveals a number of obstacles. Among those, the difficulty of accessing data appears as the sole obstacle that is really specific to data journalism—though it could be compared to the overall issue of access to sources that fundamentally shapes newsmaking. The other impediments relate to broader difficulties currently encountered by news organizations: a lack of financial resources that result in a constant pressure, a generalized lack of time to be spent on activities that do not directly result in quick, effective output, and a need for trained manpower to keep up with the pace of innovation. These generic traits of contemporary media organizations are further accentuated by the particular context: French-speaking Belgium is a small media market, where modestly sized news organizations that have to cover the full spectrum of news are consequently short of resources.

There is no doubt that data journalism exists in French-speaking Belgium. It is a notion discursively populated by many people, tools, and organizations—all enrolled in the way data journalism *matters* and hence constituting its material reality. Some of these actors are even shared, showing that there is a (modest) consensus on what data journalism is made of. Data journalism undoubtedly constitutes a “matter of concern” (Latour 2005), which exists in spite of the relative lack of actual undertaking. The absence of data journalism artefacts, convenient “matters of fact” that we could gather and display as evidence, does not mean that data journalism does not exist: if “highly uncertain” and “loudly disputed,” matters of concern are “real, objective, atypical and above all, *interesting* agencies” (Latour 2005, 114, emphasis original). Data journalism, as a socio-discursive practice, is being constructed by the interactions of a small group of very diverse actors that interpret, imagine, and try out ways to explain what can be done with data in journalism. The definitions they propose are as varied as their positions, and the interrelations among their discourses, and how they end up appropriated in their practices, are the concrete mechanisms that shape data journalism.

Notes

1. When referencing the interviews conducted for this study, respondents are identified by a unique number and by a (set of) letter(s) that reflect(s) their role(s): J = journalist, T = trainer, M = manager, X = other. The codes are sometimes combined, as some respondents had more than one role.

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