Accepting automated news as "low-quality" journalism

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Abstract

This ethnographic case study explores how developers, editors, and reporters in two Norwegian newsrooms evaluate automated news and which logics underlie their assessments. Despite automation being described as the most disruptive data-centric practice of journalism, the observations and in-depth interviews show that all three groups define automated texts as journalism. At the same time, they characterize automated news as simplistic, lacking creativity and a critical approach, and argue that today's machine-written texts are incapable of fulfilling central professional ideals such as critical scrutiny and advocating on behalf of the citizenry. Accepting automated news as journalism while simultaneously stressing its low quality shows a growing gap between what the newsroom groups are willing to accept because of organizational demands and what they ideally want journalism to be. The conflicting assessments may indicate financial motives gaining ground within Nordic media companies.

KEYWORDS
automated reporting, quality, professionalism, journalism, boundary work

Introduction

Automated reporting, informing the public about everything from sports results to the intensity of earthquakes, is currently being implemented by newsrooms all over the world (Carlson, 2014, p. 416; Van Dalen, 2012, p. 648). Despite being described as the potentially most disruptive data-centric practice of journalism (Carlson, 2014, p. 416), few empirical newsroom studies have explored how newsroom workers react when their newsroom starts implementing automated news and why they respond as they do. Text analyses addressing the topic have, however, found that the innovation is met with mixed feelings (Carlson, 2014; Lindén, 2017; Van Dalen, 2012). For instance, automated reporting is seen as a threat due to its low cost and ability to provide wide coverage in little or no time. At the same time, automating routine stories is believed to give human reporters more room for research and in-depth reporting (Van Dalen, 2012, p. 655).

Through an ethnographic case study of two Norwegian newsrooms in very different phases of the automation process, this study aims to broaden the knowledge of how newsroom workers relate to automated news. Applying the sociology of professions, the focus of the study is the evaluation of automated texts and which norms underlie the assessment. New technology is known to broaden the field of who might be considered a journalist and, of especial interest to this study, *what might be considered journalism* (Zelizer, 2004, p. 23). Studying the implementation of a technology known for its disruptive potential can therefore be particularly rewarding when attempting to understand how the boundaries of journalism are negotiated. The selected newsrooms of the study are the news agency NTB, which has been publishing automated news since 2016 (Michalsen, 2016), and the regional newspaper *Adresseavisen,* which published its first automated stories in 2019 (Lindebø, 2019). A total of 23 in-depth interviews were conducted with developers, editors, and reporters in addition to about a week of field observations in each newsroom.

Recent studies have shown that previously unthreatened boundaries between journalistic and business-oriented functions are dissolving, often rhetorically motivated by survival and an industry crisis (Appelgren & Lindén, 2020, p. 63). In this process, new technology has been a central tool allowing managers to make journalistic labor more cost-effective and more easily controlled (Örnebring, 2010, p.

64). This development has been particularly evident within the liberal press model, where the power of management and economic motives traditionally have been high (Hallin & Mancini, 2004). In contrast, the media systems of the Nordic countries have been known as typical examples of the democratic corporatist model, characterized by a high degree of professionalism, a high level of autonomy, and low levels of perceived economic influences (Ahva et al., 2017; Hallin & Mancini, 2004). Lately, studies have indicated that the model is gradually changing and that financial motives are much stronger within the Nordic media companies today than five to ten years ago (e.g., Ahva et al., 2017; Appelgren & Lindén, 2020; Witschge & Nygren, 2009). Through exploring which logics underlie the assessment of automated news in two Norwegian newsrooms, this study can contribute to monitoring this development. The research question of the study therefore is: *How do reporters, editors, and developers assess automated reporting, and which logics underlie their evaluations?*

Throughout the text, labels such as automated journalism, algorithmic journalism, machine-written news, robot journalism, and computational journalism refer to the same phenomenon, where algorithmic processes convert data into narrative text with limited or no human intervention (Carlson, 2014, p. 416).

The rise of the market logic and the bureaucratic logic

As Freidson (2007) sees it, three opposing ideal-typical ideologies provide the rationale for the control of work: professionalism (the ideology of professional control), consumerism (the ideology of marked control), and managerialism (the ideology of bureaucratic control) (p. 106). In consumerism and managerialism, Freidson (2007) claims, work is valued primarily as a means of gaining a living or holding a job. While consumerism assumes that workers are primarily motivated by their desire to maximize their income, managerialism assumes that workers are motivated by their prospects within the organization. Moreover, both logics see any kind of work as intrinsically unpleasant. In contrast, professionalism (the "third logic") sees *work* as a good, as professionals mainly gain satisfaction in performing their work well (p. 108).

Going back to Zelizer (2004), who might be considered a journalist, and what might be considered journalism is thus dependent upon which logic is dominant. If the professional logic dominates, the collective values of the journalism profession will be central in defining what journalism is. Within managerialism, the definitional power lies with the state or with organizations and not the various groups within the organization. The same is the case in consumerism, where the power of definition is in the hands of the consumers (Freidson, 2007; Witschge & Nygren, 2009). Since the three logics are ideal-typical models, most work is controlled through a combination of the three (Freidson, 2007, pp. 106–108).

As mentioned above, several recent studies have indicated that professional control over the work of journalists is evaporating. According to Witschge and Nygren (2009), technical and economic changes are disrupting the established professional statuses, roles, and practices of journalists (p. 37). Since most journalists seem to view technology and technological development as inevitable, impersonal forces, managers can use technology as a tool to implement changes aimed at maximizing the income of the news organization, Örnebring (2010) argues. Typically, this is done by requiring journalists to "take on labor previously performed by relatively expensive technical specialists" or "by relieving journalists of work tasks that can be done by relatively inexpensive workers instead" (Örnebring, 2010, p. 64). As these changes are driven not by technological necessity but by the capitalist necessity to reduce overall labor costs (Örnebring, 2010, p. 64), the implementation can, applying the terms of Freidson (2007), be seen as consumerism and managerialism in disguise—challenging professional control over journalistic work.

Focusing on how reporters, editors, and developers assess automated reporting and the logics underlying their assessments, this study will explore whether the introduction of automated news results in an acceleration of the development described above. First, it is necessary to take a closer look at the phenomena of professionalism, professional-quality perceptions, and boundary work.

The professional logic and its quality perception

In short, the professional logic can be described as a collective occupational ideology of how things *should* be. The logic consists of values, attitudes, professional language, and symbols (Heggen, 2008, p. 323; Schön, 1988, p. 33; Witschge & Nygren, 2009, p. 56). It is important to note that the various practitioners included in a profession can have different professional identities despite sharing a common logic. Heggen (2008) explains the difference between a *professional* identity and a *profession's* identity. While the professional identity can vary from reporter to reporter, the profession's identity is, as described above, a group identity—characterized by common symbols more than joint action (p. 323). Between the two identities, there is a complex interaction. When the professional identities of enough reporters change—for instance, due to technological and economic changes—the professional identity will also be altered (Heggen, 2008, p. 323; Witschge & Nygren, 2009, p. 49).

Within the sociology of professions, the ideal-typical profession is often described as an autonomous occupation with specialized knowledge and special obligations toward society. Many scholars see these characteristics as closely linked and mutually dependent. In the same way as the essence of democracy has been described as the tension between liberty and duty, freedom and responsibility, the essence of a profession can be described as the tension between autonomy and obligation, work and integrity (Sullivan, 2005, p. xv). Following from this, professional self-regulation is not an automatic privilege; it is earned based on the profession's contribution to society. Hence, the phenomenon can be described as an exchange of mutual benefit (Abbott, 1988; Freidson, 2007; Schön, 1988; Sullivan, 2005). In return for access to journalists' expertise and community service, society has, for instance, granted the journalism profession privileges such as autonomy, special legal protection, and financial subsidies of various kinds (Eide, 2011, p. 19).

If following the logic of professionalism, a change toward more managerialism and consumerism can have dramatic effects. The social obligation of the journalism profession is often said to be the production of content of democratic importance (Kovach & Rosenstiel, 2007). In this way, journalists position themselves as a key part of the democratic system (Petersson, 1996). For professions to main-

tain their privileged positions, ideology alone is not enough. They must also prove their value through actual work results. If too many members of a profession are unable to fulfill the profession's proclaimed aim over time, it could be accused of "treatment failure," which, in turn, can weaken the profession's jurisdiction over news production (Abbott, 1988, p. 46). In Dzur's (2008) words, professionals cannot just *say* that they serve vital social interests; "they must in fact do so" (p. 62). Put simply: to strengthen the profession's jurisdiction over news, journalists need to be better than other groups and the lay public at producing content of democratic importance.

Storytelling with a purpose

Following from the above, the professional logic has a great impact on what might be considered *real* or *ideal* journalism. In current Western journalism, the dominant professional logic is said to be the social responsibility theory (Benson, 2008, p. 2593). According to this logic, the main aim of the journalism profession is providing democratically relevant information that is as close to the truth as possible and holds those in power accountable (Downie & Schudson, 2009; Kovach & Rosenstiel, 2007). This implies that the reporting provided should be impartial, neutral, objective, and fair and that the journalists are autonomous and free from ties. In addition, quality aspects such as immediacy, actuality, speed, and a strong moral and ethical foundation are often highlighted (Deuze, 2005; Downie & Schudson, 2009; Kovach & Rosenstiel, 2007).

Efficient communication is also an essential part of the profession's aim. Ideally, reporters should explain complicated events, issues, and processes in clear language to a broad public and provide information in such a way that people will be inclined to listen (Downie & Schudson, 2009, p. 10; Kovach & Rosenstiel, 2007, p. 189). In more concrete terms, this means applying storytelling techniques including character, a wide timeline, a broader analysis, and an inclusive reporting style. Predictable and formulaic storytelling should be avoided while illuminating a greater meaning and designing the information for a multiple audience is seen as a plus (Kovach & Rosenstiel, 2007, p. 196). The dominant professional perception of quality reporting can thus be summed up as "storytelling with a purpose" (Kovach & Rosenstiel, 2007, p. 189).

As automated reporting is known for its disruptive potential, its introduction may alter the dominant professional perception of quality reporting over time. Through text analysis, Van Dalen (2012) has, for instance, found that journalists responding to automated news content highlight creativity, analytical skills, personality, and the ability to write linguistically complex sentences as more important—while factuality, objectivity, simplification, and speed are seen as less important (pp. 648–649). Hence, the introduction of automated news seems to make reporters favor ideals connected to skills that humans, according to Susskind and Susskind (2015), are better at than machines: cognitive capability, affective capability, and moral capability (p. 277).

Different groups with different logics

An interesting question for this study is whether there are notable differences between how reporters, editors, and developers assess automated reporting. When producing news together, the three groups can be said to engage in boundary work around a boundary object (news) (Appelgren & Lindén, 2020; Holton & Belair-Gagnon, 2018). This means that basic questions of definition—such as who counts as a journalist, what counts as journalism, what is appropriate journalistic behavior, and what is deviant—are raised (Carlson, 2015, p. 2). In this process, the underlying logics of the groups influence the groups' definitions.

As shown above, the professional logic of journalism is known to stand strong among Nordic journalists. But what about the two other groups? Starting with the editors, leaders in journalism are often recruited from the editorial staff and generally have experience of reporting before entering management (Waldenström et al., 2019). At the same time, they tend to be influenced by the positive ideals surrounding innovation, new technology, and change (Appelgren & Nygren, 2019; Creech & Nadler, 2018). Hence, it is likely that the assessment of automated news conducted by the editors in this study is highly influenced by managerialism and consumerism, building upon a basis of professionalism. Developers, on the other hand, are—not surprisingly—known to be highly technology-centered (Creech & Nadler, 2018, p. 182). Creech and Nadler (2018) labeled the developers' logic *entrepreneurial* and listed several character-

istics. The logic, for instance, renders journalism's contemporary crises as merely technical, marginalizes normative concerns about journalism's democratic purpose, favors market-oriented solutions, and prioritizes technological advancement (Creech & Nadler, 2018, pp. 182–188). Of Freidson's (2007) logics, it is thus probable that the developers of this study are influenced more by consumerism and less by professionalism, compared to the other groups.

Unlike other occupational groups, such as doctors and lawyers, the journalism profession is said to have a weak material and structural aspect. There are, for instance, no absolute educational requirements to become a reporter (Waisbord, 2013, pp. 77–83). Because of the lack of credentialism, journalists are often forced to apply journalistic values in describing what sets them apart from other occupational groups (Waisbord, 2013, pp. 77–83). Hence, symbolic boundary work, based upon the professional logic of journalism, is said to be especially important (Singer, 2015, p. 22). If the profession cannot put these values into practice to the extent that they wish, and consumerism and managerialism instead become central in defining what journalism is, a redesigning of journalism will occur (Witschge & Nygren, 2009, p. 54). In the long run, the values can fade to such an extent that they do not set journalism apart from other media genres such as entertainment and fiction (Witschge & Nygren, 2009, pp. 54–57). How the newsroom workers of this study assess automated reporting, and which logics they are influenced by, is in other words part of a bigger picture, where their professional identities over time contribute to forming the profession's identity.

Methods

To carry out an intensive and detailed study of how newsroom workers evaluate automated news, a case study was conducted. Case studies are useful in the study of human affairs, as they concentrate on small groups, communities, decisions, programs, organizational change, or specific events over time (Yin, 2014, p. 31). The fact that the unit of analysis is small makes it possible to understand complex social phenomena (Yin, 2014, p. 4). In addition to attempting to achieve a comprehensive understanding of the event under study, a case study also seeks to develop more general theoretical statements

about regularities in the observed phenomena. Hence, it may be possible to acquire knowledge of a phenomenon from intensive exploration of a single case (Becker, 1970). In the case of this study, getting detailed information about how the news workers at *Adresseavisen* and NTB assess automated reporting can, for instance, broaden the knowledge of how professional values among newsroom workers in Nordic countries change with the arrival of new technologies.

Based on the resources available to the project, two Norwegian cases were selected through purposive sampling. NTB was selected since it is known as the first Norwegian newsroom to experiment with automation, starting the publishing of automated stories in 2016 (Michalsen, 2016). Hence, the newsroom is an example of a nontraditional actor that matters in journalism (Hermida & Young, 2019). Wanting to explore whether a newsroom's structure, tradition, or automation history affected the newsroom workers' assessments, *Adresseavisen*, a regional newspaper in the process of implementing automated news, was selected as the second case (Lindebø, 2019). Together, the two cases gave the empirical data the intended divergence.

A thematic and abductive qualitative text analysis approach

Due to the lack of ethnographic newsroom studies within research on automated journalism, semi-structured, in-depth interviews and observation were selected as the main methods. As classic qualitative approaches, these methods are reliable tools when attempting to gain in-depth information about social phenomena such as relationships, processes, roles, and responsibilities (Aase & Fossåskaret, 2014, pp. 11–13). Three newsroom groups were identified to be of special interest to the study: editors (due to their role as decision-makers), reporters (representing the journalism profession), and developers (creating the algorithms). The development editors in each newsroom were asked to suggest candidates for each group and to make sure that the candidates differed in gender and age. They were also asked to suggest reporters from different newsroom teams. After minor refinements to ensure variety, 10 newsroom workers at *Adresseavisen* and 13 newsroom workers at NTB were selected for a total of 23 semi-structured, in-depth interviews. All groups were asked a set of common and customized questions. Altogether, eight report-

ers, eight editors, two project managers, and five developers participated. The interviews, each lasting about 35 minutes, were taped, transcribed, and anonymized.

The formal interviews were supported by field interviews and four days of observation at *Adresseavisen* (May 2019) and seven days of observation at NTB (September 2019). During the observation period, the newsrooms granted free access to all editorial meetings. This provided a fuller understanding of the relationships in the newsroom and an opportunity to control whether some parts of the information obtained during interviews seemed correct. In the meetings, editors and reporters were usually present, while the developers more often than not were represented by the development editor. Choosing an "observer as participant" stance, the overall aim was to influence the phenomenon under study as little as possible (Østbye et al., 2013, pp. 115–116).

To conduct a thematic analysis, the first step was getting familiar with the empirical data by reading all the transcribed interviews (Braun & Clarke, 2006, p. 87). With the help of NVivo, different features were coded in a systematic fashion across the entire data set. While most of the initial codes were mainly descriptive/organizational (Fletcher, 2016, p. 6), the rest of the analyzing process consisted of collating these codes into potential themes with the help of the theoretical framework of the study. Hence, the analysis process can be described as *abductive*, defined as a combination of induction and deduction (Østbye et al., 2013, p. 114).

The algorithms of the two newsrooms

As intended, both the scope and complexity of the automation of the two newsrooms varied to a great degree. At the time of the fieldwork, the news agency NTB had been publishing automated reports from the professional Norwegian soccer league since 2016. Later, the agency had used algorithms in several contexts—for instance, covering national and regional election results (Johansen, 2017). In comparison, *Adresseavisen* had only one algorithm (named the "real estate robot") producing automated news (Lindebø, 2019).

Comparing the output of the most developed algorithm of NTB (the "soccer robot") and the "real estate robot" of *Adresseavisen*, the typical story from the "soccer robot" was about 150 words, provid-

ing information on the goals in a match, previous matches, the number of spectators, etc. In comparison, the stories of the "real estate robot" were only about 50 words and provided information on the address of the property, the sale price, the names of the old and new owner(s), etc.

In addition to the automated news, both *Adresseavisen* and NTB applied research algorithms to search registers and databases on a regular basis and send automated emails to the editorial staff if any irregularities occurred. The focus of this study is, however, the *automated* algorithms that turn data into narrative text with hardly any human intervention.

A dual attitude toward automation

In the analysis of the empirical material of the study, one of the most surprising aspects was how similarly the three different groups responded to the questions. This may, of course, be due to the quality of the questions or the selection of respondents. As the lack of variation was so significant, it may also indicate that the three groups (in both newsrooms) have adapted their professional identifies to function as a team. As underlined by several studies (e.g., Lewis & Usher, 2016; Karlsen & Stavelin, 2014), boundary work often functions as a means of coordination rather than mere disagreement, where "outsider" groups typically implement the dominant logic of the newsroom.

When the respondents were asked about the opportunities and challenges of automated news, the most frequently repeated argument across the groups was that the algorithms would free the reporters from repetitive, mundane work, making it possible to concentrate on "hard" and "important" reporting. In addition to real estate sales and sports reports, film premieres, ship calls, power outages, etc. were mentioned as suitable topics for algorithms. In short, the conviction seemed to be that everything repetitive and routine in character can and *should* be automated—as this would allow the newsroom to broaden its coverage at little or no cost. Some respondents also argued that algorithms make fewer mistakes than humans if the input data are of good enough quality, while others saw possibilities in atomizing the news.

Regarding challenges, some respondents mentioned that algorithms are expensive to develop, that they are "stupid" and inflexible, and that offering news produced by algorithms might lead to journalism losing

credibility since people tend to mistrust machines. Some were concerned that a massive number of automated stories would take up space that could be used for other, more important types of journalism in the various distribution channels. With too much automated content, there is a risk of "suffocating our own service with stories most people find irrelevant," said Editor 1 at NTB. However, as later explored in more detail, the most common objections among all the three groups (including the developers) concerned the *quality* of the automated texts.

High hopes for the new technology

Taking a closer look at the logics underlying the above evaluations, several of the most frequently mentioned opportunities and challenges can be directly linked to the quality aspects of the journalism profession. The fact that machines make fewer mistakes can, for instance, help the newsroom provide information that is as close to the truth as possible. At the same time, it is perceived as a problem that people tend to mistrust machines, as the profession's social mandate (serving democracy) is based upon trust. Seeing atomization and algorithmic research as opportunities follows the same professional logic. To be meaningful, relevant, and engaging, it is better if the information is designed for multiple audiences (atomized). To provide democratically relevant information that powerful groups wish to conceal, reporters need assistance from sophisticated research tools.

At the same time, several arguments can be linked to the values of managerialism and consumerism. The view of automation as a way of broadening the newsrooms' coverage at little or no cost seems to be based upon the capitalist value of making journalistic labor more cost-effective. As put by Reporter 3 in *Adresseavisen*, "[Automated reporting] gives *Adresseavisen* an opportunity to give the readers information they are very interested in, which generate income for us. Because it sells. We even sold subscriptions on robot texts. And that is absolutely crazy, but we have." The fact that algorithms make it possible for news organizations to offer customers more stories, increasing the produced quantity, is in other words seen as positive.

The argument of algorithms freeing reporters from repetitive, mundane work, making it possible to concentrate on "hard" and "important" reporting, seems to also be rooted in consumerism. Relieving reporters

of work tasks that can be done instead by relatively inexpensive algorithms echoes the above description of changes aimed at maximizing the income of news organizations. In contrast, the second part of the argument, freeing time for more "important" reporting, appears to be inspired by professional values. When the respondents from NTB were asked if the tasks of the reporters had changed during the years of automation, the answer was, however, "No." "When people ask what the automatization has meant for the everyday life in the department, I have to be honest and say that from day to day, and from week to week, the automated stories do not mean much," Editor 4 in NTB said. Instead, the respondents described a rather dramatic change toward poorer working conditions. In line with most traditional newsrooms in the Western world (e.g., Kleis Nielsen, 2016), both NTB and *Adresseavisen* have experienced significant downsizing over the last decade. "We are far fewer than we were just a few years ago. It influences our journalism. It influences the opportunity to do big projects, to investigate, and to get outside the editorial office," Reporter 5 at *Adresseavisen* said. Reporter 1 at NTB described today's tempo as "absolutely insane." "Compared to what it was ten years ago, when I started, we hardly spend time on the stories anymore," the reporter said, describing a feeling of always being short of people.

The fact that the respondents argued that the algorithms freed up time to concentrate on "hard" and "important" reporting, while they also stated that the introduction of automated news had not led to any positive changes, showed a surprisingly positive attitude toward the new technology. When confronted with the reality of their statements, several respondents argued that the algorithms would evolve and become much more sophisticated in a few years, which in turn would lead to better work conditions in the *future*. Instead of basing their arguments upon the real qualities of automated news, these respondents seemed to base their arguments upon their hopes for automated news. Interestingly, and as later discussed in more detail, this optimism was also shared by reporters, not just the developers and editors.

Automated reporting as "low-quality" journalism

When assessing automated news, the most common concern among all groups was, as indicated above, the *quality* of the automated texts.

The overall argument was that the algorithms lack some essential human attributes. Because of this, they are bad writers, they do not have a nose for news, and they do not know how to analyze information and see new, surprising contexts. Moreover, they do not know how to communicate, they are not creative, they do not have a critical sense, they do not detect obvious errors, they cannot convey atmosphere and emotion, and they cannot sense and smell, make ethical assessments, bond with humans, react instantly when something happens, or be flexible. Editor 4 at NTB put it as follows: "According to the classic, traditional perception of what an article should look like, the texts are not good enough. At least not today, and the question is whether we will get there at all."

The claims concerning why algorithms cannot produce "quality news" can be divided into two overlapping categories: arguments directly related to the normative aim of journalism and arguments related to storytelling and form. The respondents' criticisms of the algorithms for lacking a "nose for news" can, for instance, be linked to the aim of finding relevant information—where the "nose" helps distinguish between irrelevant information and the information citizens in a democracy need to govern themselves. Reporter 2 at *Adresseavisen* stated the following:

In some areas, I think the human brain is superior—for instance, in the ideas phase. I do not understand how deciding what matters can be robotized. I do not say that because I personally feel threatened but because I am intellectually pretty sure that it is not possible.

The arguments that algorithms lack the ability to analyze information and see new, surprising contexts can also be traced to the aim of providing relevant information since much important information might be lost without these aptitudes. Editor 4 at NTB described *good stories* as nuanced and having a personal touch while at the same time providing analysis and understanding—all characteristics based on "variables that a human brain can connect." "An artificial brain can of course connect many more variables but not in the way we want," the editor added. Developer 1 at *Adresseavisen* simply said: "The human brain is much better. It does not need a specific list to draw comparisons with. Humans can associate freely, while a robot needs clear commands." The fact that algorithms cannot communicate or bond with humans, in addition to being inflexible and incapable of reacting instantly when something happens, is also connected to information loss. "In a con-

versation with a human being, a lot of exciting tips and things can arise that a robot cannot register," said Reporter 1 at *Adresseavisen*.

Furthermore, several of the arguments can be linked to the professional aim of holding those in power accountable. If one does not have a critical sense or the ability to detect obvious errors, it is hard to conduct critical scrutiny. Developer 1 at *Adresseavisen,* for instance, described automated news stories as "lower-quality reporting, in general," before stating that algorithms "might produce the kind of news alerts and short news stories that you find everywhere all the time but can never produce the thorough, investigative stories. That requires too much, I've figured out."

When it comes to arguments relating to storytelling and form, skills such as creativity, good writing, observations of atmosphere, and reports of sounds and smell are often linked to the aim of providing information in such a way that people will be inclined to listen (Kovach & Rosenstiel, 2007). Reporter 4 in *Adresseavisen* put it as follows:

What makes a text good? Often, it is the ability to associate that helps make a text come alive: the fact that you can describe things in several ways; you color it in a way. In feature writing, the saying is "show, don't tell." A robot will probably only "tell."

Based on the above, editors, developers, and reporters in both newsrooms seemed to assess the quality of automated reporting as low because it does not live up to journalism's professional ideals. At the same time, they seemed to think that what the robots produce *is* journalism and not just information. As an example, Reporter 2 in *Adresseavisen* described the texts of the real estate robot as journalism because the robot's programming is based on journalistic principles and evaluations:

It is journalism because it provides information of interest to society: who buys and sells properties, and what the acquisition price is. […] It is not journalistically processed, although it has journalistic assessment as a premise. The robot is given a command. So even though it is not journalistically processed, there are some journalistic principles that make it journalism.

The respondents thus appeared to see automated stories as journalism—but journalism of a *low order*. This seems to be a variant of what Carlson (2014) called "good enough" journalism, meaning that the texts are capable of meeting the minimum expectations of news

writing—that they provide clear and accurate information—but nothing more (pp. 424–425).

Stretched between organizational and professional needs

The respondents' assessments of automated reporting seem to be highly inconsistent. Representants from all groups accepted automated reporting as journalism while at the same time highlighting its low quality. Without further human development, the respondents argued, the stories cannot live up to the ideals of the profession.

Based upon the above analysis, the double and conflicting assessments seemed to be caused by a set of incompatible logics: (1) the professional logic of journalism, defining the quality ideals of the groups, and (2) the market and bureaucratic logics, where the prioritizing of the needs of the news organizations leads to the acceptance of low-quality output as journalism. To better understand the underlying motivations for standing in this split, the following section will explore the conflicting logics in more detail.

The "low-quality" label: For keeping privileges and standing out

Starting with the professional logic, the journalism profession has, as described above, traditionally gained its privileges because it is trusted to provide information of democratic importance. As shown above, automated news is ranked low in the professional hierarchy because the respondents did not believe that the algorithms can provide information of high public value. Allowing algorithms to produce a large proportion of a newsroom's output could thus result in the profession neglecting to fulfill its societal obligations. Since failing to fulfill societal obligations over time can result in a "treatment failure" (Abbott, 1988, p. 46) followed by the loss of jurisdictional control, the respondents' assessments of automated news as "low-quality" reporting make sense. When a respondent worries about the massive number of automated stories suffocating the newsroom's platforms with stories "most find irrelevant," the concern of being accused of failure is probably the cause. The logic is simple: if the public affairs reporting becomes less visible, and the audience associates journal-

ism with simpler stories produced by algorithms, the jurisdiction over news could be weakened.

Following the professional logic of journalism, another possible assessment of automated news could have been that the algorithms increase the profession's opportunities to provide information and thus strengthen its social mandate. The ideals related to in-depth reporting do, however, seem to have a higher symbolic value than ideals related to extensive, instant reporting. It is the investigative, creative, and analytical stories the respondents wanted to be associated with. In comparison, qualities associated with machine-written texts—such as factuality, accuracy, objectivity, simplification, and speed—are rarely mentioned.

In addition to the social mandate, a central part of news workers' professional logic is claiming to be experts in providing news (Folkerts, 2014, p. 228). This implies that journalists need to provide better reporting than regular citizens. Embracing the simple and factual reporting produced by algorithms would thus mean vouching for a type of journalism that many groups could easily reproduce. Protecting the status of skills that are hard to acquire can therefore be a wise strategy. In a time when new technology has blurred the line between journalist and citizen, and the skilled work of trained reporters is being challenged by untrained groups (and by algorithms), this approach may be especially important (Kleis Nielsen, 2016, p. 89). This may be the reason why most of the quality aspects highlighted by the respondents involve several of the "human" capabilities emphasized by Susskind and Susskind (2015) and Van Dalen (2012). The importance of being critical, having a nose for news, putting information in context, seeing unobvious connections, and the ability to associate are strongly correlated with the *cognitive capability* of humans (Susskind & Susskind, 2015, p. 277). Moreover, the importance of writing with a personal touch; describing feelings, noises, scents, and atmosphere; understanding human interaction; and finding the right way to tell a story is related to *affective capability*, while the ability to conduct ethical assessments is linked to *moral capability* (p. 277). Interestingly, the developers also seemed to favor human skills for the simple reason that "the human brain is much better." This argument indicates that this "outsider" group has implemented the dominant logic of journalism (see also Karlsen & Stavelin, 2014).

The journalism label: For keeping their jobs

Despite the strong position of the professional logic, representatives from both newsrooms and all three newsroom groups defined automated reporting as journalism. When asked why they answered that the programming is based on journalistic principles and evaluations and that the information is of interest to society. Both arguments are in line with the professional logic. The first argument referred to the autonomy and expertise of journalism, as the algorithms are based on *journalistic* principles and evaluations—and not, for instance, the logic of developers. The second argument referred to the societal obligation of journalism. By focusing on autonomy and social obligation—and not, for instance, creativity, watchdog potential, and analytical quality—the respondents thus found a way of justifying that automated texts can be called reporting. At the same time, the texts deviate from the professional ideal to such a degree that they are labeled *low quality*.

The distance between ideals and automated reporting raises the question of *why* the groups chose to accept automated texts as journalism. It would, after all, be easy to find dismissive arguments. The answer can probably be found in the statements describing today's tempo in the newsrooms as "absolutely insane," making it hard to spend time on any story. As several respondents emphasized, automation can broaden the newsrooms' coverage at little or no cost. Moreover, this expansion will hopefully generate income. Hence, the respondents seemed to view the algorithms as possible saviors in a time characterized by poor working conditions within the organizations. In line with consumerism and managerialism, gaining a living and holding a job thus seemed to have higher priority than performing the work well. Put shortly, the groups seemed to accept what they saw as "low-quality reporting" conducted by algorithms because the downsized newsrooms needed to provide their readers an acceptable output. Hence, the choice seems to be between adapting the professional requirements to the reality of the newsroom or endangering the future of the news organization (and thus their own jobs).

Concluding remarks

By investigating how reporters, editors, and developers assess automated reporting and which logics underlie their evaluations, this study found that (1) the newsroom groups assess automated reporting in a surprisingly similar manner and (2) the conflicting logics steering their assessments make them accept automated reporting as journalism while simultaneously highlighting its low quality.

First, all groups of respondents, including the developers, seemed to hold traditional journalistic values in high esteem. In this way, the newsroom workers can distinguish between who is a journalist and who is not and what journalism is and is not. To all three newsroom groups, this was important because the weakening of the jurisdiction over news, in the long run, could lead to journalism losing privileges. Such a loss would affect not only the reporters but the whole news organization. Hence, it is understandable that developers and editors would advocate for the professional logic of journalism. After all, if everybody was a journalist, surviving as a journalistic organization would prove difficult. In this perspective, claiming to produce quality news of democratic relevance through a skillset held only by trained workers of the newsroom seems wiser than embracing quantity and more easily obtained skills. As a result, automated news is labeled *low-quality journalism*.

Second, all groups, including the reporters, accepted the low-quality reporting of algorithms as journalism, as the downsized newsrooms need to provide their readers an acceptable, low-cost output. Hence, economic and managerial considerations seem to be strongly emphasized in everyday production. This might not be surprising, as commercial requirements in news production are an old phenomenon. What is surprising is that the profit and production demands of the news organization seem to be adapted to the same degree by all three newsroom groups. While editors and developers are known to prioritize revenue and technological advancement, Nordic reporters are characterized by their strong professional orientation. The fact that this group accepted machine-written texts of "low quality" as reporting and highlighted the value of journalism that sells can indicate financial motives gaining ground within Nordic media companies. This finding echoes the previously mentioned studies of Ahva et al. (2017); Appelgren and Lindén (2020); Witschge

and Nygren (2009); and Örnebring (2010), where formerly unthreatened boundaries between journalistic and business-oriented functions have been shown to be dissolving, often rhetorically motivated by survival and an industry crisis.

To summarize, there seems to be a growing gap between what the newsroom groups of this study are willing to accept as journalism because of organizational demands and what they ideally want journalism to be. The result is a contradictory assessment of automated news. If this development continues, and most stories produced have less and less in common with the ideals of the profession, the result may, ironically, be a weakening of the organizations that the respondents aim to save. Moreover, *quality news* may come to mean automated reports published in "real time" at no particular cost.

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