

# A broken mirror?

*From representation to presentation of  
gender in Scandinavian news media*

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## ABSTRACT

Across Scandinavia, one can witness a situation where gender equality has previously been at the forefront of the political and societal agenda, but where progress now seems to be slowing down. The news media is a domain where this negative development is particularly pronounced, and several studies have established that the Scandinavian news media display a more unequal gender representation than the society they supposedly mirror. In this article, we report on an ongoing cross-Scandinavian research project on news media content, where we explore not only the traditional metrics of how many men and women are in the news, but also, more importantly, how women and men are portrayed in news media content. The study demonstrates significant gender discrepancies, echoing findings from previous studies on the quantitative representation of women and men, and, more importantly, it introduces *presentation* as an additional qualitative metric. Consequently, we contribute with an analytical framework involving a range of qualitative parameters through which the news media industry can comprehensively evaluate gender equality within their content.

**KEYWORDS:** gender representation, gender equality, journalism, news media, qualitative gender presentation

## Introduction

The interest in the representation of women and men in the news is not new, especially not in a Scandinavian context. Over the years, numerous studies and reports have disclosed how equal representation between genders in the news has not yet been achieved (Asr et al., 2021; GMMP, 2020; Kassova, 2020; Manilla, 2017; Niemi & Pitkänen, 2017; Rao & Taboada, 2021; Shor et al., 2015; Sjøvaag & Pedersen, 2019), and some have shown that in some instances, we are even moving backwards (Djerf-Pierre & Edström, 2020a; Jørndrup, 2021). Simultaneously, the discussion of why we see such an imbalanced portrayal of the world in the news often revolves around the so-called reflecting-reality argument (Gill, 2008), that is, the question of whether the news simply mirror society's structural imbalances, or whether the imbalances are a result of the process and culture in which journalists and newsrooms operate. As the amount of research on this topic progresses, we seem to find growing evidence for the latter of the two arguments (Djerf-Pierre, 2020; Jørndrup, 2021; Sjøvaag & Pedersen, 2019), and especially in a Scandinavian context, it has become evident that the portrayal of the world offered by news media is more imbalanced than the structural gender inequalities in the world they portray. As Djerf-Pierre and Edström (2020b: 35) put it:

The relative disconnect between media and reality is pervasive [...]. The media world is less gender equal than the “real world”. In this regard, the news media seem to be more of a break block than a blowtorch for gender equality in the world.

Further, when considering the latest score of the Nordic countries on the internationally recognised benchmark of gender equality in the news media, the GEM-Index (Djerf-Pierre & Edström, 2020c), it offers little support for the often-forwarded myth that the Nordic countries are leading in their progress towards reaching gender equality (Diversity Council, 2022). The Nordic countries are, for instance, on par with, and in some instances even outpaced by, countries such as Bulgaria, the US, and Puerto Rico. This, we argue, gives us even more reason to keep focusing on representation of gender in the Scandinavian news media, but also to consider if measuring the traditional quantitative aspects of gender representation is sufficient to work towards creating a more equal gender balance in the news. First, however, we briefly outline the potential consequences of traditional gender misrepresentation as they are presented in existing literature.

Stagnation, potentially even regression, in the development towards gender equality in representation in the news has serious consequences. From the perspective of safeguarding democracy, it is problematic that women and men still have unequal possibilities to voice their perspectives on the events of society in this essential arena for public debate and democratic dialogue (Edelmann, 2023; Padovani et al., 2022). Inequality, in terms of who we see in the role of experts – and thus who gets to explain, evaluate, and thereby influence societal events (Niemi & Pitkänen, 2017) – is particularly critical in relation to the fundamental role of news media as a platform for democratic dialogue.

From a representational perspective, equal presence of women and men in the news is a prerequisite for a news coverage of society aligned with the actual nuances and diversity of the world. When predominantly men “make the news” (GMMP, 2020), we risk missing out on topics and viewpoints that are important to, or driven by, women, and thereby our news offer a deficient image of the world. Furthermore, the news media are also often where we find our role models, and as such, we need both women and men of different ages, colours, sexuality, beliefs, and so on represented, since “You can’t be what you can’t see” (Djerf-Pierre & Edström, 2020c: 60).

From a commercial point of view, it does not seem like a viable, nor very profitable, strategy either – to only target half of the possible audience. Research has established that women deselect news outlets exactly because they cannot see themselves reflected in them (see, e.g., Toft & Palmer, 2019). So, unequal representation in the news does not support an aim of making news relevant and accessible to all, nor of having as many consumers as possible.

But perhaps representation in the traditional, quantitative sense is not enough to counter the imbalance. We may need to develop and include more qualitative parameters in relation to how genders are included in the news. Because we still seem to be at a standstill. It is quite peculiar how so little has changed over the last decades, when we have so many studies pointing out this unfortunate representational imbalance. Therefore, with this article, we underline the importance – as many researchers have before us – of consistently tracking the numbers of women and men participating in the news. But we also propose, however, a move beyond the simple counting of heads. Thus, we argue that it is imperative that we start discussing not only how *many* women and men are included in the news, but also, and perhaps even more importantly, *how* they are included.

We therefore suggest that the quantitative aspects of how many women and men are represented and where they are represented in the news be supplemented with the qualitative aspects of *how* women and men are presented. Attention to presentation, the way in which women and men are rhetorically and visually depicted, is, we argue, paramount if we want to profoundly advance the way we monitor gender equality in the news – and pave the way for a more balanced and fair portrayal of the genders.

Our main interest is to move beyond the “reflecting reality” argument (see, e.g., Gill, 2007; Jørndrup, 2021), in which the continuous gender imbalance in news is considered a result of the media simply reflecting the world and its structural imbalances. Consequently, the argument suggests that the reason why women are not used as subjects and sources to the same extent as men is because they do not hold the same positions of power; for example, that more men than women are experts (in the academic sense) and more men than women are CEOs. From a Scandinavian point of view, this argument is somewhat challenged if we look at, for example, women in politics, where several studies have found the real-life divide between women and men to be more in balance than the news portrayal of it (Djerf-Pierre, 2020; Djerf-Pierre & Edström, 2020a). Niemi and Pitkänen (2017) have also suggested that the imbalance cannot be explained by

labour market structures alone, but that journalistic practice as well as a tradition for using male experts also needs to be taken into consideration. Further, if we look at academic experts, a recent Danish study shows that the female academic experts from natural science presented in the news accounted for as little as 12 per cent, while they accounted for 31 per cent within natural science at Danish universities (Johansen & Johansen, 2022). So, instead of pursuing the “reflecting reality” argument, we here wish to explore the indicators of gender (mis)representation that can be said to result from choices made by Scandinavian newsrooms and journalists, namely *how* they represent genders. So, what we seek to explore in this article is how we can add to the traditional quantitative aspects of gender representation and develop qualitative metrics that can be systematised, and thus counted, in order to detect the qualitative differences in how news media depict and frame women and men in the news.

We first provide a short theoretical and contextual background for the empirical study of gender representation and presentation in Scandinavian news media.

## **Contextual and theoretical background**

### **Three indicators of gender representation in news: The GEM-Index**

For our purpose of comparing gender representation in news content across Scandinavia with a goal of developing qualitative metrics, we take our point of departure in the conceptualisation of gender equality offered by Djerf-Pierre and Edström (2020c) and the Global Media Monitoring Project (GMMP, 2020): the GEM-Index. The index measures the following three indicators of gender representation in the news:

- Representation: The extent to which both women and men are depicted in the news, and in the central areas hereof.
- Topics: The extent to which both genders are present in the news topics that are most critical to society.
- Roles: The extent to which women and men are equally represented in different roles.

The question of representation is perhaps the topic that has been researched and measured the most, with the Global Media Monitoring Project (GMMP) as a key contribution. The GMMP was started in 1995 and runs every five years, with the latest edition published in 2020. One of the worrying conclusions made in the recent report is that “gender equality in the world depicted in the news still lags behind gender equality in the physical world” (GMMP, 2020: 5). If we look at the GMMP results in the Nordic countries, Scandinavia performs slightly better than the global average of 25 per cent women in the news, with Sweden performing the best, with 37 per cent of the news participants being women. Over time, however, the tendency is that the Nordic countries are falling behind.

Representation needs to be nuanced, as some areas of the news are more important from a representation perspective. Djerf-Pierre and Edström (2020a) argued that representational equality requires that women and men are equall-presented in the central areas of the news, that is, the front page, the main story, and the news content (as opposed to background content, special editions, etc.). We add to that the visual representation (Jia et al., 2015), that is, an attention to number and placing of pictures of women and men in the news.

Just having a woman present is not sufficient. The topics in which representation is made are also important to consider (Djerf-Pierre & Edström, 2020a). The reasoning behind this is quite logical: A 50/50 distribution between male and female participants in the news does not ensure equal influence, if, for example, the female participants are mainly found in the lifestyle and celebrity sections. For this reason, it is suggested that we pay special attention to topics considered to be critical (and powerful) to society, that is, politics, economics, society, and business. The latest GMMP report (2020) shows us that on a global scale, women are underrepresented in all topics measured. The lowest score of female topical representation is within politics and government (20%) – one of the most critical topics in society.

Lastly, we have the indicator of roles. Equality here means that both women and men appear equally in the different roles that news media involve (experts, spokespersons, commentators, sources of experience, etc.), but several studies have found that women are more often assigned peripheral roles, for example, as experience sources, while men more often appear as experts (GMMP, 2020; Sjøvaag & Pedersen, 2019). Especially the role of expert is important, as the experts set the agenda for, and to a certain extent, construct and drive important societal debates, and consequently, influence our understanding of the world (Howell & Singer 2017; Niemi & Pitkänen, 2017). Furthermore, we consider the role of expert as especially interesting, as the journalist can often *choose* between different experts to include, as opposed to particularly spokespersons and sources of experience, and consequently they have an opportunity to actively create a more equal representation. The latest numbers related to roles illustrate that, globally, women make up 24 per cent of experts and commentators (GMMP, 2020).

### **How can we disclose the presentation of gender in the news?**

With a point of departure in the three indicators of the GEM-Index, we suggest a fourth indicator, which addresses the *presentation* of genders in the news. Presentation, we argue, can be uncovered in the way news subjects are rhetorically and visually depicted when they do appear in the news. Based partly on prior research (e.g., Andrich et al., 2023; Asr et al., 2021; Rao & Taboada, 2021; Shor et al., 2019; Vandenbergh, 2019) and partly on our own explorative study, we suggest the following four sub-indicators of gender presentation that can be disclosed by analysing the language and visual strategies applied to describe news subjects. These four sub-indicators form the basis of our explorative study of signs of gender (mis)presentation.

First, formal and informal titles are assigned to subjects. It is relevant to analyse both the number of formal titles assigned to a news subject, as a sign of the relative importance they are given, as well as the qualitative character of the informal titles: Do titles refer to a source's performance or appearance? It is generally accepted that using formal titles when describing people is indicative of power, authority, and social distance (as described in classic work on language politeness, speech acts, and formality; see, e.g., Austin, 1975; Joos, 1962; Lakoff, 1973). Further, often the more informal titles describe subjects' relationships to others or their personal capabilities (see also Vandenberghe, 2019).

Second, rhetorical strategies are used to describe news subjects. We suggest an analytical lens taken from classical rhetoric, that is, the traditional forms of appeal: ethos, logos, and pathos (as originally presented in Aristotle's seminal work *The Art of Rhetoric*). Thus, analysing the text with a focus on direct and indirect descriptions of subjects, we categorise descriptions as dominated by logos when neutral and factual language is used to present a subject; as ethos when the subject's credibility, power, and importance is boosted; and as pathos when emotional, relational, and physical traits are attributed to subjects (Jørgensen & Villadsen, 2023).

Third, rhetorical agency is ascribed to quotations from subjects. We draw attention to the verbs framing quotes by a subject: citation-verbs. This may seem less important, but in a presentational perspective, a quote marked with, for example, "the source *claims*", will arguably come across as more convincing than the same quote marked with "the source *says*". For this particular purpose, a taxonomy of verbs has been elaborated, taking inspiration from, among others, Andersen (2018) and Norlyk (2016). Thus, verbs can be indicative of either expertise or experience, or they can be neutral.

Fourth, visual agency is ascribed to subjects. We suggest that the agency and strength of a news subject is either enhanced or weakened depending on how they are visually depicted (Huddy & Gunnthorsdottir, 2000). If a subject is depicted as active and looking into the camera, they will come across as more powerful and in charge of the situation than if pictured as passive and, for example, gazing away from the camera. Our conceptualisation of visual agency is inspired by research from the fields of art history, literature, and cinematics, where we find the notion of "the male gaze" (Berger, 2008; Mulvey, 1975) where the traditional display of the woman is as being passive and looked at. Further, a person depicted alone will arguably come across as more important and take more of the viewers' attention than when pictured as part of a group.

In identifying these qualitative sub-indicators of gender presentation in news content, we have, in line with the GEM-Index, strived to identify and isolate elements that are relatively straightforward to analyse and identify, although working qualitatively will always require more analysis and consideration than when simply counting heads, topic areas, and so on. The aim still is, however, to suggest generally applicable indicators that not only experts but also newsrooms may possibly apply on their own content.

# Research design

## Datasets, samples, and sequence

We draw on two different datasets that have been analysed sequentially. In this article, however, we focus mainly on the findings from the second dataset, as the first functions as background and qualifier of our sampling for the second.

The first dataset and analysis provide a snapshot of the overall presence of men and women across nine Scandinavian newspapers, which we utilise for two purposes: 1) to compare the status of gender representation in our selected newspapers with prior studies, and 2) most importantly, to qualify the selection of newspapers for our second dataset and analysis.

In the first dataset and analysis, we collaborated with Nordic media monitoring and analysis provider Infomedia, who performed an automated analysis of the percentage split of gender representation in selected newspapers via their database of all published news content across the Scandinavian countries (see Appendix 1 for a description of method). This dataset comprises a total of nine newspapers, three each from Denmark, Norway, and Sweden (see Appendix 2). The sample includes all print content, including news, editorials, letters to the editor, and comments, but excludes commercial content, in all nine newspapers over a time span of one week in January 2023.

In each country, we selected three types of newspapers: a tabloid, a broadsheet (conservative-liberal), and a specialised-business newspaper, based on the following sample criteria:

- include different newspaper types
- focus on newspapers covering the topic areas related to the GEM-Index (i.e., business, politics, economy, and society)
- explore what qualitative forms misrepresentation of genders takes

To meet the last criteria, we selected newspapers where we expected to find the most prominent gender imbalance (i.e., more conservative-liberally oriented media; see Bankert, 2020). Had we aimed for a more representative sample, we could have included more socialist, or centre-left newspapers, as research has shown that attention to gender equality is more prevalent for the centre-left and socialist side of the political values spectrum (Bankert, 2020), but we chose not to, as our initial aim was to explore the qualitative character of misrepresentation in the news.

Based on the initial findings from the first dataset, we selected three newspapers for our main analysis following these considerations:

- The Danish newspapers in the first dataset displayed the most significant gender imbalance in the sample, so they provide a critical case (Bryman, 2016) for our study.
- The Swedish newspaper displayed the least significant gender imbalance; they are best-in-class.

We opted for different newspaper types in our second analysis to enable an exploration of possible media type differences (see Jia et al., 2015). Here, we selected the two Danish newspapers with the most substantial misrepresentation, tabloid *Ekstra Bladet* and broadsheet *Jyllands-Posten*, and specialised-business Swedish newspaper *Dagens Industri*, thus allowing us to explore aspects of the significance of newspaper genre more in-depth. We selected two newspapers in the critical case category, again to make sure that we analyse data where gender imbalance is indeed present. Furthermore, when we speak of gender equality in general in the Scandinavian countries, we often turn to Sweden as the role model, and Denmark is often last-in-class (Manilla, 2017). As such, we wanted to include one Swedish newspaper in our deep-dive to enable comparison between extremities in our first dataset.

The second and main analysis samples the same time span as in the first. This time, however, we coded and analysed the content manually to move our study beyond the overall representational count of the presence, topics, and roles. Consequently, the manual coding allowed us to perform a qualitative analysis of *how* the genders are presented.

### **Content, categories, and focus**

Our main dataset and analysis provides a deep-dive into the three chosen newspapers. The coding categories are presented in Table 1. The choice to include all content, including editorials, comments, letters to the editor, and so on, is based on the argument that to analyse gender presentation, we need to analyse the news from the perspective of an average lay reader. Therefore, we chose not to follow professional journalistic demarcations between, for example, content fully produced by editorial rooms and journalists and content produced by other actors such as commentators (e.g., public debaters). The only content we excluded from the dataset is explicit commercial content (i.e., advertisements).

Apart from the first two (pictures on the front page and in the rest of the newspaper), all categories are linked to a unique subject. So, all identifiable individuals mentioned as either subjects (e.g., individuals who are mentioned) or sources (e.g., experts, individuals who provide first-hand experience, spokespersons, and commentators) in each news story, in each newspaper sample, have been coded according to the following thirteen codes, presented in Table 1.

**TABLE 1** Coding categories

	<b>Unit</b>	<b>Overall code</b>	<b>Coding categories (individual registration = no predefined category)</b>
Representation	Pictures on front page	Gender	Male subject/source / Female subject/source/ No identifiable person in picture
	Pictures in all content	Gender	Male subject/source / Female subject/source / No identifiable person in picture
		Name	Individual registration
		Gender	Male / Female
		Date	Individual registration
		News genre	News / Interview / Background- / Reportage-feature / Portrait-profile / Interview / Review / Other
	Individual identifiable source	Topic area	Politics / Business / Economy / Society / Climate / Lifestyle / Culture / Health / Celebrities / Diversity / Sports / Criminal
		Subject/source type	Subject: Mentioned Source; Expert / Spokesperson / Experience / Commentator
		Number of citations	Registered
		Type of citations	Direct / Indirect / Not cited
Presentation	Individual identifiable source	Visual presentation of source, person is depicted	Alone-active / Alone-passive / In a group-active / In a group-passive
		Assigned formal titles	Individual registration
		Assigned informal titles	Individual registration
		Assigned agency: the verb used to frame a direct or indirect quote	Individual registration
		Ethos / Logos / Pathos	Individual registration

Our main dataset thus allows for cross-analysis both between the three newspapers and between categories. As the aim of this article is to explore the possible forms that gender misrepresentation and presentation takes, we do not present a comprehensive analysis of all possible aspects. Instead, we first focus on the most prominent elements of the quantitative, representational analyses, following the lead of the GEM-Index, adding an additional layer where we have found further signs of misrepresentation. But, as our most important contribution is the exploration of qualitative, presentational part, we choose to elaborate our findings from the coding categories in the lower part of Table 1 the most, as this is both where we find the most novel insights in comparison with previous studies, but also the empirical grounding of our suggested addition of presentation to the GEM-Index.

When we move into our five suggested qualitative sub-indicators, we also move the analysis into less definite and thereby indisputable territory. Though this is the case for all qualitative studies, we do acknowledge that deciding whether a citation verb is, for example, framing a source as emotional, is a less clear-cut analysis than deciding if a story can be categorised in the politics or lifestyle topic category, and part of that analysis will often also be dependent on a closer reading of the overall story and context. This is the nature of qualitative research, and therefore we have applied double coding (Bryman, 2016) in our study, by initially having two coders code the same selection of the overall sample, following our overall description of the coding categories. Based on a comparison of this double coding, we have then adjusted the guidelines for the coding categories, to make the final coding as consistent as possible and thereby ensuring intercoder reliability (Bryman, 2016). As a result of this qualification of the coding, we discovered, for example, that whether the use of the first or last name of a news subject is a sign of either intimacy or power distance is often dependent of the subject's overall position.

## **Analysis of gender representation across nine Scandinavian newspapers**

Our first analysis across nine Scandinavian newspapers gave a rough percentage split of the representation of gender (see Appendix 3).

It is evident that all newspapers have an unequal distribution of gender, with all but one found to have less than 30 per cent women represented in their content – the lowest representation of women is in Danish tabloid *Ekstra Bladet* (21%) and the highest is in Norwegian broadsheet *Aftenposten* (31%).

Our findings show an even smaller representation of women than the latest GMMP study (2020), which found 35 per cent (Denmark), 33 per cent (Norway), and 38 per cent (Sweden) women represented as sources across all media types, which may indeed be explained by our sampling of more conservative, liberally oriented newspapers. But, looking at the result on a national level, we do find the same inter-relational differences between the three Scandinavian countries as

the GMMP, with the combined Danish newspapers displaying the most unequal distribution, and the Swedish the least. So, the first dataset and analysis form a sound basis for further exploring the qualitative characteristics of gender representation in the news media, by both confirming prior studies and by qualifying our selection of the three newspapers that we perform a deep-dive analysis of.

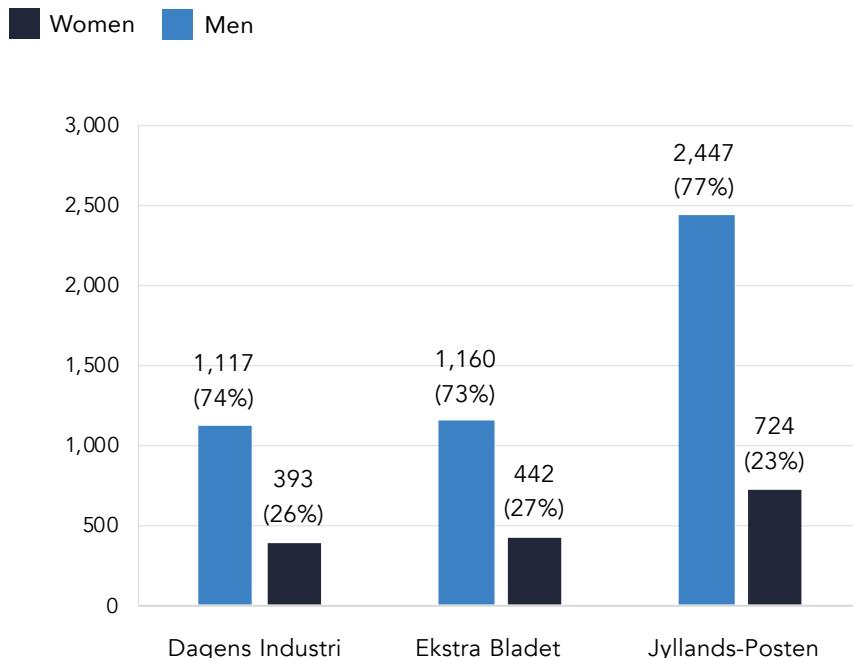
## Analysis of quantitative gender representation in three Scandinavian newspapers – reiterating the GEM-Index

In our deep-dive into Danish broadsheet *Jyllands-Posten* and tabloid *Ekstra Bladet* and Swedish specialised-business paper *Dagens Industri*, we first outline the overall findings related to the established quantitative elements of the GEM-Index and add to them our additional examples of misrepresentation.

### Representation in overall appearance: Who do we meet?

First, we find an overall gender split of the total of represented subjects in the three newspapers which is in line with the first analysis, but with some variation (see Figure 1).

**FIGURE 1** Gender distribution by media



Comments: *Jyllands-Posten* ( $n = 3,171$ ), *Ekstra Bladet* ( $n = 1,582$ ), and *Dagens Industri* ( $n = 1,510$ ): total ( $n = 6,263$ ).

The automated results can be verified by this dataset, as the largest difference between the two datasets is 6 percentage points (in the *Ekstra Bladet* sample) and the smallest only 1 percentage point (in the *Jyllands-Posten* sample) (see Appendix 4).

All three newspapers have more than 70 per cent men represented as subjects or sources. For *Jyllands-Posten*, 3,171 (77%) of the identified individuals are men, and only 724 are women, and, although the difference is smaller, the numerical imbalance is also worth noticing in the two other newspapers.

This discloses a pronounced imbalance in the representation of genders with the consequence that, with a few exceptions, all other data points in our analysis in terms of numerical representation are also extremely imbalanced – across all three newspapers.

### **Representation in visual appearance: Who do we see?**

Looking at the visual representation, that is, who are depicted, all three newspapers are imbalanced in their visual representation, with *Ekstra Bladet* the most imbalanced, with 67 per cent of all pictures showing men and only 23 per cent showing women (the remaining 10% of the pictures show no identifiable persons). *Dagens Industri* is the least imbalanced, with 52 per cent of all pictures showing men compared with 23 per cent showing women and 25 per cent with no people.

In addition, it is significant that both *Jyllands-Posten* and *Dagens Industri* have almost as many or more pictures with no people in them (cars, buildings, etc.) as they do of women. So, even though the percentage of men is lower in the visual representation, compared with the overall numbers, it does not mean that we see a more equal gender balance (i.e., a higher percentage of women). It just means that there are also pictures without people in them.

Pictures on the front page provide an important representational arena because the centre of attention and highlighted news stories appear there. Again, *Jyllands-Posten* stands out compared to the other two newspapers: On the front pages of *Jyllands-Posten*, only two women appear during the sampled week, and further, more than double the number of pictures with no persons (7 in total) than women are depicted. In that same period, twelve men appear on *Jyllands-Posten*'s front pages. In contrast, both *Ekstra Bladet* and especially *Dagens Industri* come across as less imbalanced compared with *Jyllands-Posten* and compared to their overall visual representation. Especially *Dagens Industri* shows a more balanced image, with 47 per cent of pictures depicting men, 30 per cent depicting women, and 23 per cent depicting no persons.

### **Representation in share-of-voice: Who do we hear?**

In our last point of analysis of quantitative gender representation, we look at how much each unique subject gets to say when they appear in a story, to take measuring of representation a step further. We coded all direct and indirect

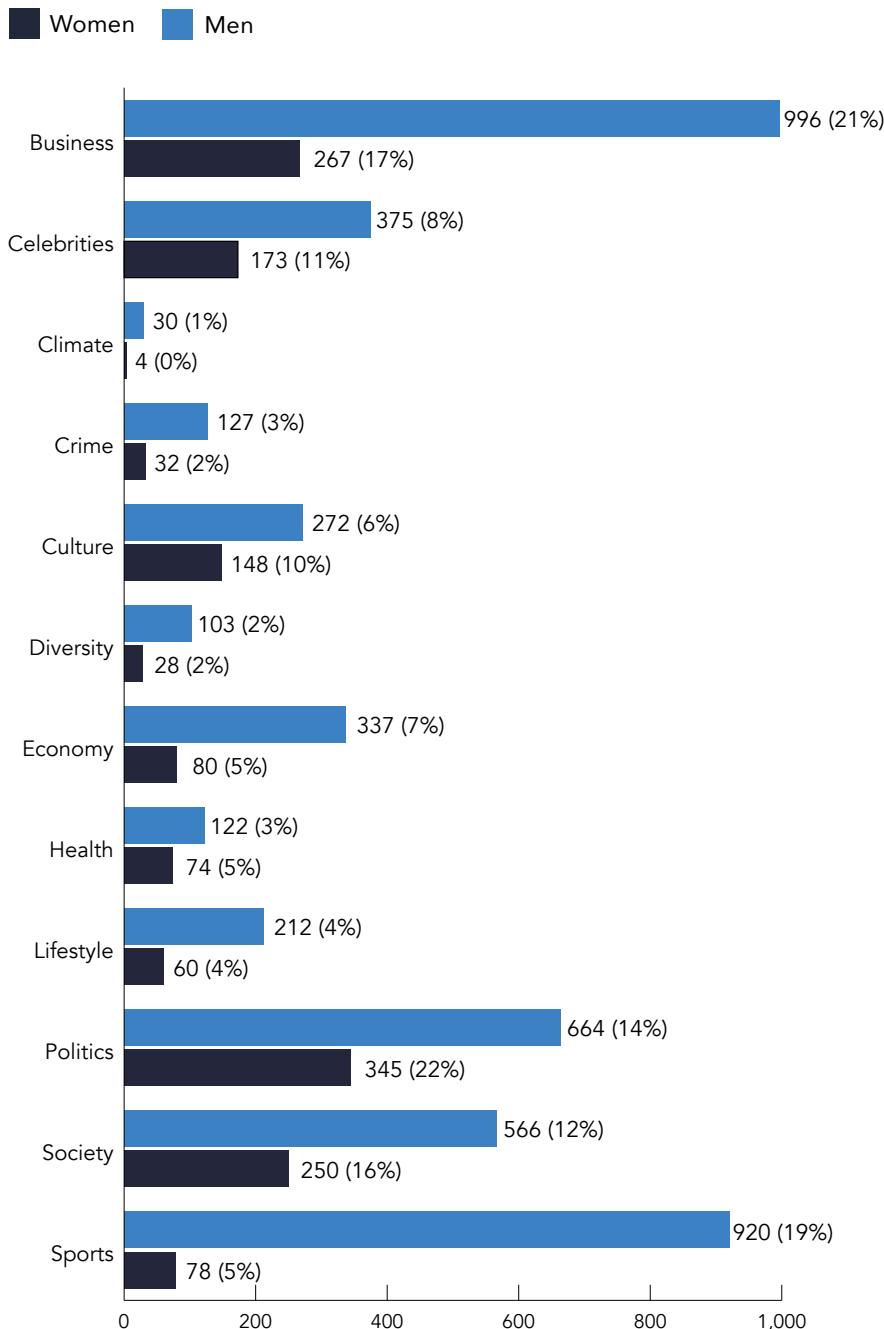
quotations from all identified subjects. Considering the vast numerical imbalance that we already uncovered in relation to representation of subjects, it is quite evident that we find that imbalance reflected in the total number of quotations per gender. For example, in *Jyllands-Posten*'s total sample, 513 quotes are from women, as opposed to 1,727 from men. So, to move the analysis further, we have analysed how many quotes each unique source gets per story they appear in, to get an average gender split on what could be called "share-of-voice" for women and men (Asr et al., 2021).

We do find a small imbalance in share of voice, as women are generally quoted 3.10 times per story, while men are quoted a bit more at 3.45 times. The analysis is uncertain, though, as the results are not statistically significant in relation to any of the three newspapers, when analysed with confidence intervals on a 95 per cent level (see Appendix 5).

### **Representation in news topics: Who talks about what?**

According to our theoretical framework, politics, economics, society, and business are the most important topic areas in news when we explore representational gender equality. Figure 2 shows the distribution of genders by news topic across the three newspapers, where again we see the overall numerical imbalance reflected, as none of the twelve topic areas coded depict more women than men, and with sports and business demonstrating the highest numerical imbalance. Therefore, we have nuanced this imbalance further to explore any additional signs of misrepresentation when we investigate how much (percentage) each topic is represented for each gender, that is, when women and men do appear, what are the topics they appear most and least frequently in.

**FIGURE 2** Gender distribution by topic



*Comments:*  $n = 6,263$ . Numerical distribution shows how many men and women appear in each topic. Percentage distribution shows that when men and women appear, what topics they appear in.

Here, the results diverge. Overall, when we only look at the topics that women and men are most likely to appear in when they do appear, women are most likely to appear in politics, business, society, and celebrity (in that order), while men are most likely to appear in business, sports, politics, and society.

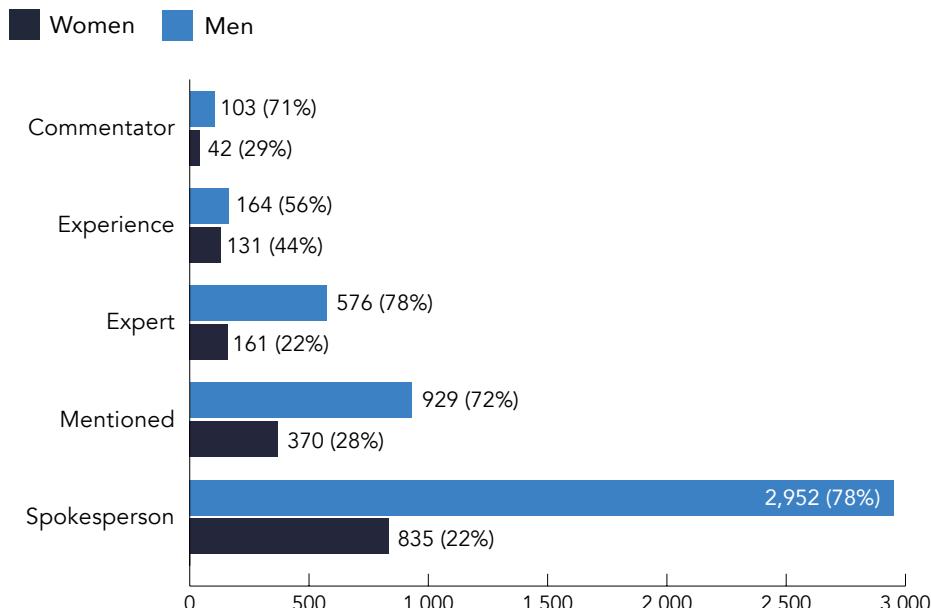
Focusing on the topic areas most crucial in our representational perspective, women appear to be proportionally more featured in politics and society (22% of the times women appear in the news, they appear in the topic of politics), while men seem to be proportionally more featured in business (21% of the times men appear in the news, they appear in business), and also, but not as significantly, in economy (7% of the times).

It is worth noticing that of all topics, only the differences in diversity, crime, and lifestyle are found to be not statistically significant when measured by 95 per cent confidence intervals.

### Representation in roles: What roles are women and men assigned?

The last of the three GEM-Index indicators is the role women and men play in the news. Here, the expert is especially important, and once again our findings support prior studies (Niemi & Pitkänen, 2017). Figure 3 depicts the overall numerical distribution of gender by subject and source type, and again, men dominate all subject and source types both in total numbers and in percentages.

**FIGURE 3** Gender distribution by source type



Comments: n = 6,263

Transferred to the readers' perspective, our study shows that for each female expert that readers encounter, they will have met more than three male experts, in concordance with GMMP (2020), where only 25 per cent of the Danish experts were women. We find even fewer: 22 per cent.

### **Quantitative representation: Summary**

Concluding the representational part of our study, we find significant imbalance in favour of men in most of the GEM-Index indicators: in identifiable represented individuals, visual representation, topic areas, and roles. We also find signs of an additional layer of misrepresentation, particularly in the source type of experts.

Our first reiteration of the GEM-Index cannot explain *why* the representational imbalances occur, but we do see misrepresentation in favour of men, especially in aspects where journalists seemingly have an opportunity to counteract them (i.e., choice of expert sources). This sets the scene for us to dive even deeper into the parts of the journalistic content that journalists do in fact control, that is, the qualitative elements of *how* women and men are portrayed: the rhetorical and visual presentation of the genders.

## **Analysis of the presentation of gender in Scandinavian news media**

We now explore our suggested four sub-indicators of gender presentation. Here, focus is on the qualitative aspects of *how* subjects and sources are presented and framed by journalists linguistically and visually. Whether these rhetorical and visual aspects are the result of conscious decision-making or of unconscious actions is beyond the scope of our study, but this only makes our exploration of the indicators more important.

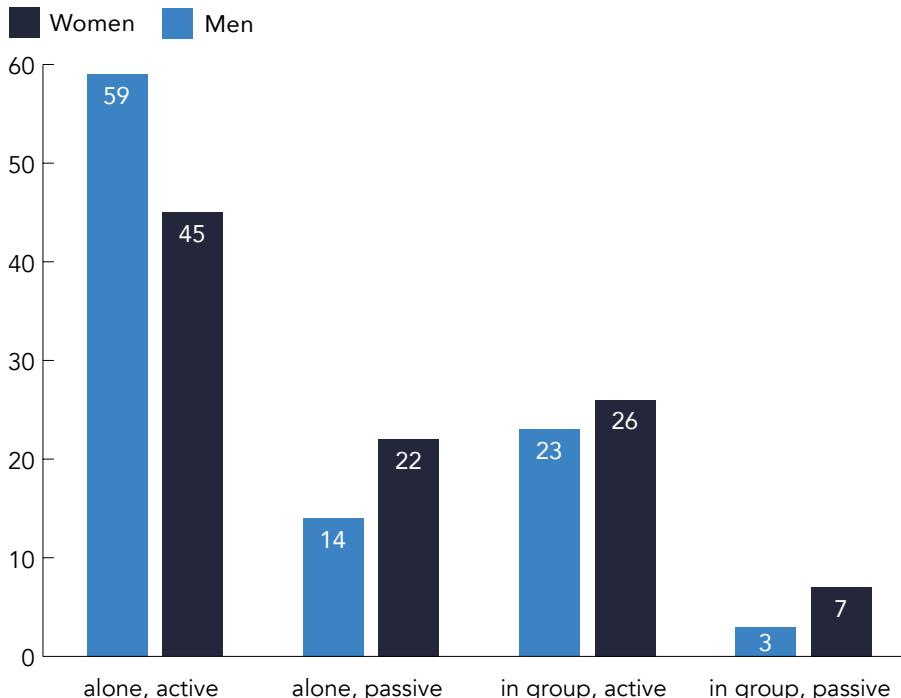
### **Visual presentation of gender: How do we see women and men?**

To operationalise visual presentation, we have coded (see Table 1) the pictures of identified unique news subject in two categories (four combinations), as depicted in Figure 4.

The "active" category covers pictures where the subject is depicted, for example, as walking, talking, or looking actively into the camera. The "passive" category entails pictures where subjects stand or sit passively, looking away.

As there are more men than women in the dataset, we find men numerically outnumbering women in all four categories. Therefore, we have focused on the proportional distribution, that is, when women and men are pictured, how are they respectively distributed in our four categories.

**FIGURE 4** Distribution of picture category by gender (per cent)



Comments:  $n = 878$

Here, we see that both genders are most often pictured active and alone. But men are more frequently pictured active when alone compared to women, while women are more frequently passive when alone compared to men, although the confidence interval indicates that the latter is not statistically significant. In groups, the confidence intervals indicate no statistical difference between men and women portrayed as active in pictures, but women are more often passive than men. Additional examination of the differences between the three newspapers reveals no further significant variation. Overall, this means that men are presented more than women as active, especially when alone, while women are presented more than men as passive, both when pictured alone and in groups.

#### **Rhetorical presentation of gender: How are women and men described?**

In the analysis, we have also explored how women and men are described rhetorically by coding all text according to forms of appeal applied. Below we have exemplified these codings via quotations from our data:

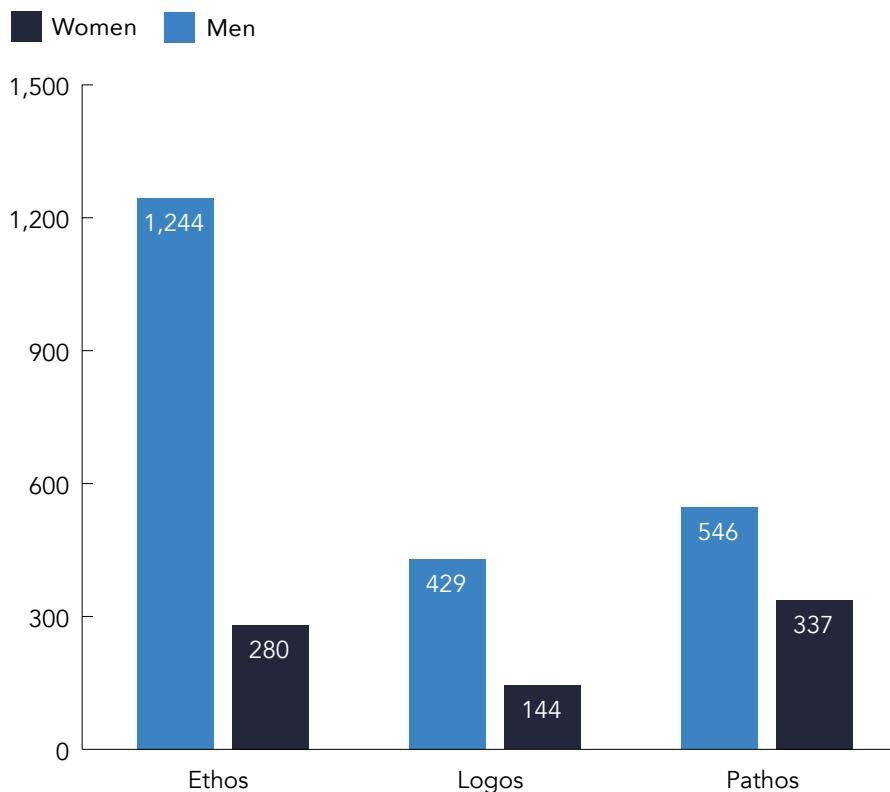
- Logos refers to descriptions where subjects are described via neutral information, such as age, nationality, or affiliation (“twenty-three-year-old...”, “German...”, “From Tesla”).
- Pathos is coded when the subject’s and source’s relational status to others is mentioned (“mother”, “ex-wife”, “married to”, etc.), when the physical appearance is described (“she adds smilingly”, “sex-symbol”),

when descriptions of the emotional state or reactions of the subject are included (“he still remembers the smell of...”, “she does not feel comfortable...”), and also when the subject is called by first name only (“Mette”, “Pia”, etc.), suggesting a closer relation and thereby undermining the authority of the subjects.

- Ethos is coded when the descriptions mention the performances of the subject (“former world champion”, “first/youngest to...”), or stress the importance and popularity of a subject (“all of Denmark’s”, “a big personality”, “charismatic”). Ethos is also noted when the subject is called by last name only (“Putin”, “Elleemann”), as it boosts ethos in the form of power-distance. Finally, many of the applied informal titles (e.g., “super-swimmer”, “top manager”, “boss”, and “talent”) add ethos to the subject, as does the use of the formal title in singular form (e.g., “the minister” in place of the subject’s name).

Looking at the total count of ethos, logos, and pathos, considerable imbalance is evident in all three rhetorical strategies, especially related to ethos (see Figure 5).

**FIGURE 5** Gender distribution of ascribed ethos, logos, and pathos in source descriptions (n)

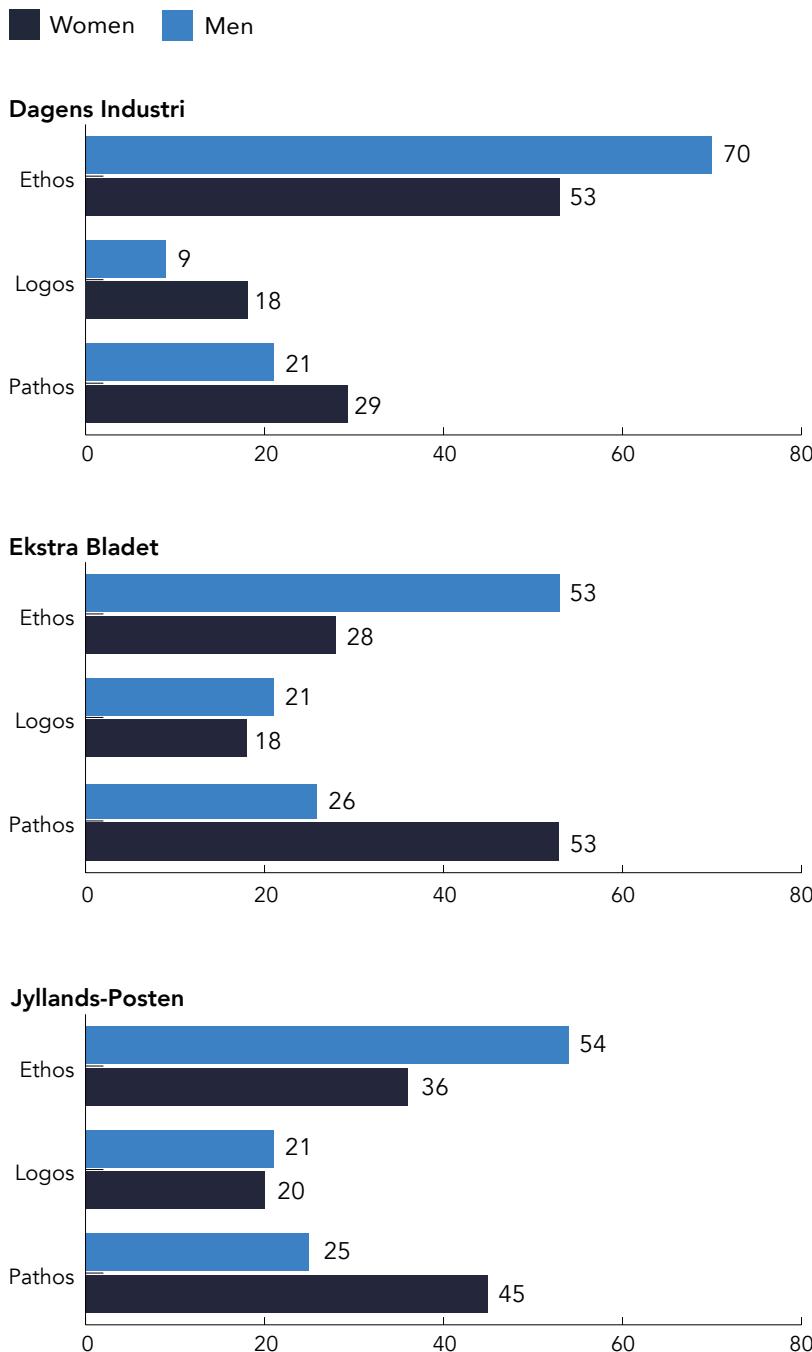


Comments: n = 2,980

When we again look at what appeal form is used most and least in the descriptions of the group of represented women as opposed to men, the result is almost identical: Men are still most often described via ethos, while women are most often described by use of pathos (both statistically significant), while logos is evenly distributed.

A closer look at the use of rhetorical strategies applied by the three newspapers (see Figure 6) reveals dissimilarities. Both *Jyllands-Posten* and *Dagens Industri* apply ethos more often to both men and women compared to *Ekstra Bladet* – in *Dagens Industri*'s case, a lot more. Regarding pathos, *Dagens Industri* applies it less than both *Jyllands-Posten* and *Ekstra Bladet*, although still markedly more to women than to men. *Jyllands-Posten* also applies more pathos to women than to men, but the difference between how much pathos the genders get is smaller compared to *Ekstra Bladet*. *Ekstra Bladet*, the tabloid in our sample, shows the most extreme use of rhetorical forms, as men get assigned significantly more ethos compared to women, whilst women get significantly more pathos compared to men, perhaps indicating a genre-specific difference.

**FIGURE 6** Gender distribution of ascribed ethos, logos, and pathos in *Jyllands-Posten*, *Ekstra Bladet*, and *Dagens Industri* (per cent)



Comments: *Jyllands-Posten* ( $n = 1,506$ ), *Dagens Industri* ( $n = 504$ ), and *Ekstra Bladet* ( $n = 970$ ).

## Rhetorical presentation of gender: What are women and men called?

We have registered every formal and informal title added to the subjects in our sample. In relation to formal titles, we do not see any significant differences between women and men. But that changes for informal titles.

Table 2 lists the ten most frequently assigned informal titles for female and male subjects, respectively, across the three newspapers, with the individual frequency in parentheses. Apart from the numbers naturally being lower for females in all three papers (for *Dagens Industri* so low that we only have a few that appear more than once), we find a striking difference.

**TABLE 2** Most frequently ascribed informal titles for women and men in *Ekstra Bladet*, *Jyllands-Posten*, and *Dagens Industri*

Ekstra Bladet		Jyllands-Posten		Dagens Industri	
Women	Men	Women	Men	Women	Men
Mor (9) [Mother]	Søn (11) [Son]	Hustru (10) [Wife]	Dansker (21) [Dane]	Designteam (3) [Design team]	Grundare (15) [Founder]
Søster (8) [Sister]	Boss (6) [Boss]	Datter (7) [Daughter]	Topchef (14) [Top boss]	Tidl. ordförande (2) [Former politi- cal spokesperson]	Tidl. vd (5) [Former CEO]
Hustru (7) [Wife]	Stjerne (5) [Star]	Mor (5) [Mother]	Leder (8) [Manager]	Tidl. vd (2) [Former CEO]	Finansmann (3) [Financier]
Kæreste (3) [Girlfriend]	Chef (5) [Executive]	Besætnings- medlem (3) [Crew member]	Kendt (6) [Celebrity]	Designduo (2) [Design duo]	Tidl. finans- minister (3) [Former Minister for Finance]
Datter (3) [Daughter]	Tennis- stjerne (4) [Tennis star]	Søster (3) [Sister]	Besætnings- medlem (5) [Crew member]	Bioaktuel (1) [Currently featured in film]	Pappa (2) [Father]
Tid. politiker (2) [Former politician]	Spiller (3) [Player]	Tidl. kirkeminis- ter (3) [Former Minister of Ecclesiastical Affairs]	Far (5) [Father]	Mamma (1) [Mother]	Bror (2) [Brother]
Stjerne (2) [Star]	Slutrunde- debutant (3) [Finals débutant]	Kone (3) [Wife]	Medstifter (5) Co-founder]	Tidligare FN- ambassadör (1) [Former UN Ambassador]	Son (2) [Son]
Enke (2) [Widow]	Dømt (3) [Convicted]	Kæreste (3) [Girlfriend]	Ven (5) [Friend]	Tidligere språkör (1) [Former spokes- person]	Styrelsesproffs (2) [Professional Board Members]

Løvinde (2) [Lioness]	Kæreste (3) [Girlfriend]	Tidligere minister (2) [Former Minister]	Japaner (4) [Japanese]	Kinekännare (1) [China expert]	Tidligare statssekretare (2) [Former Secretary of State]
X-faktor-værtinde (1) [X Factor hostess]	Bank-boss (3) [Bank boss]	Kvinde (2) [Woman]	Tidligere præsident (4) [Former President]	Hedgefond-investara (1) [Hedge Fund Investors]	Expert (2) [Expert]

The applied informal titles are categorised into three colour-coded categories in Table 2:

- relational titles (green): The subject's relation to others (e.g., "mother", "sister", "widow", "ex-wife") or the gender (e.g., "businessman") is stressed.
- ethos-boosting titles (blue): Subjects are depicted as powerful, competent, or important (e.g., "boss", "star", "famous").
- neutral titles (white): ("swimmer", "footballer").

It is quite evident that in the two Danish newspapers, most significantly *Ekstra Bladet*, women are assigned relational informal titles much more often than men, who on the other hand are assigned ethos-boosting titles more. For *Dagens Industri*, this is not the case. *Dagens Industri* also tends to use the neutral informal titles the most. So, again an example of difference in how women and men are presented can be detected, but only in the Danish newspapers. Whether this is a result of differences related to nationality or media type is beyond this study to determine.

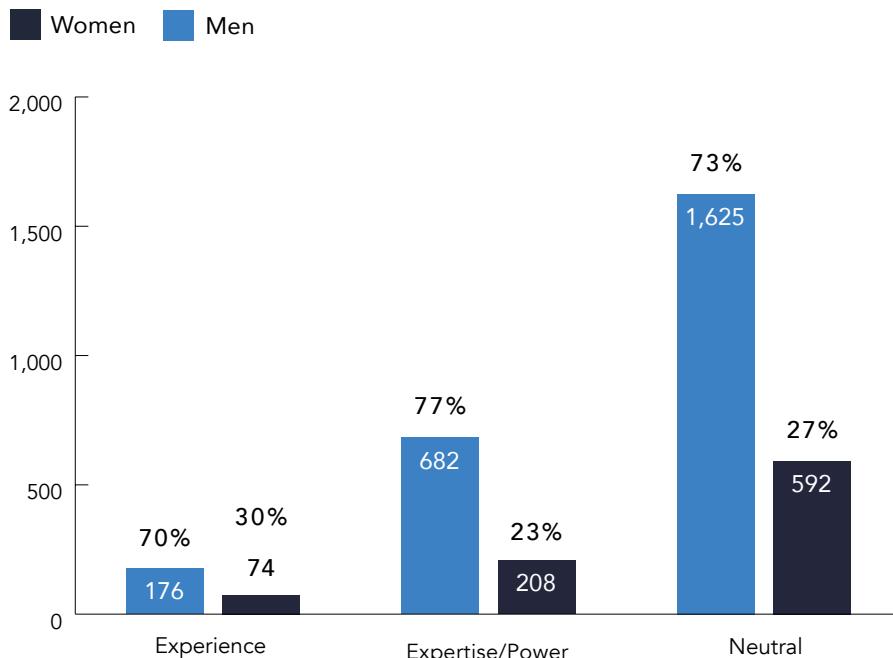
### Rhetorical presentation of gender: Focusing on agency

Finally, we look at signs of gender mispresentation in the agency assigned to women and men when quoted. We categorised all citation-verbs in our dataset into three overall categories which relate to the strength, trustworthiness, and role they imply:

- Expertise/power-verbs (e.g., "conclude", "evaluate", "recommend" "explain", "define", etc.)
- Experience-verbs (e.g., "remember", "feel", "experience", etc.)
- Neutral verbs ("say", "write", "state", "according to", etc.)

Figure 7 shows the distribution of women and men in the total sample, according to which citation-verb category they are assigned.

**FIGURE 7** Gender distribution in citation-verbs



Comments:  $n = 3,357$

As already mentioned in the quantitative part of the analysis, our findings show that men out-quote women significantly. Therefore, they also dominate in all three citation-verb categories when we investigate the qualitative use of agency in this part of the analysis.

Women are greatly outnumbered in expert citation-verbs, so, from a reader perspective, also in terms of agency, men are the experts.

## Conclusion

Our study demonstrates that the differences in how women and men are depicted in the Scandinavian news are not solely related to the classical quantitative parameters of gender equality. Rather, there are also significant qualitative differences in the way the genders are presented, meaning that we need to move beyond the traditional focus on how *many* and start looking into how women and men *appear* in the news. The study thus contributes by offering a fourth indicator in addition to the three classic indicators of gender representation in the news (representation, topics, and roles): presentation. This indicator can uncover the way women and men are rhetorically and visually depicted in the news. More specifically, we have disclosed gender inequality in several qualitative parameters that we suggest as indicative of equal presentation. First, men are presented visually as more active than women when alone in pictures. The power, expertise, and importance of men is boosted in indirect descriptions (rhetorical strategies) to a much greater extent

than for women. In the analysis of pathos, we see that women, on the other hand, are more often described through their emotions and relations to others. Finally, we find signs of the power-distance and individual importance being emphasised more for men through the use of last names and formal titles, and oppositely diminished for women through the use of first names.

The three newspapers show variation in how they represent and present gender: Overall, we can confirm the Swedish newspaper as the best case in that they are less imbalanced, in representation, especially in the overall presence of women, and in the visual balance (front page), but also in the presentation-indicators, where *Dagens Industri* offers a more balanced image of the genders, especially in the less gender-differentiated use of informal titles, compared with the two Danish newspapers. Thus, the expectation we had for Sweden to be a role model is confirmed in this study, albeit *Dagens Industri*'s representation is still generally imbalanced in relation to, for example, subject and source type distribution, and use of ethos-promoting rhetorical strategies.

The tabloid and the specialised-business papers demonstrate how important it is to take media type into consideration in relation to especially the suggested fourth indicator of gender equality, presentation, as the tabloid applies more emotions (i.e., use of pathos, relational informal titles) to especially female subjects and sources. The specialised-business paper does it less, but instead tends to use more ethos for both genders. *Jyllands-Posten* stands out among the three with the most imbalanced results in representation. Both Danish papers are also the most imbalanced in respect to presentation. It is, however, important to note that based on our study, we cannot determine whether the differences are indicative of national or media-type differences, or perhaps a mixture of the two.

The impression of the world that readers are left with when reading these three newspapers – especially the Danish papers – is one of men as the dominating actors in the news, who are boosted through ethos, and women framed through pathos as peripheral participants, experiencing events: a stereotypical portrayal (see also Andrich et al., 2023) in which neither men nor women may find sufficiently nuanced and broad room for self-reflection.

Based on our study, we suggest theoretical implications, particularly in relation to presentation. Here, we call for more studies on larger samples of data to produce a more solid knowledge base for this suggested new indicator of gender equality, but also studies on specific media types, national contexts, and contextual aspects. Moreover, it is clearly more time-consuming and thus resource-intensive to study the suggested qualitative metrics than what is the case for the quantitative approach. Future studies could include the testing and development of new automated methods for analysing the qualitative dimensions as well. Further, in terms of the traditional quantitative parameters, we suggest that share-of-voice be added to the representation indicator, and here, more research on imbalance in share-of-voice is needed. Finally, an overall discussion of how we reach equality in gender presentation is also needed: Do we describe everyone in uniform ways, or do we offer a broader and more nuanced worldview with regard to all genders?

## Discussion and implications

As we set out to move the discussion of equal gender representation past the recurring discussion about whether gender imbalances come from the surrounding society or from within the newsrooms, this study has uncovered misrepresentation of genders that seemingly cannot be justified by referring to external societal imbalances alone. Thus, in line with many earlier studies, our study illustrates the necessity of keeping track of all the established indicators of gender representation in the news media, as a balanced representation of women and men in the news is still far from being achieved. Thus, continuous awareness seems indispensable if we are to change the status quo – perhaps more so on a local and practitioner level than in research.

But what is perhaps most important are the many uncovered instances of rhetorical and visual mispresentations which point unambiguously towards choices – albeit not necessarily conscious – made by journalists, editors, and newsrooms in their depictions of women and men, visually as well as rhetorically. This is where journalists and editors have an opportunity to achieve better gender equality through both representation and presentation that is more balanced and fair than what we have uncovered. The suggested qualitative aspects of presentation of women and men, and our findings related to them, thus call for journalists and newsrooms to broaden and improve their view on what elements to consider when discussing and working towards a more equal gender representation in their news production.

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## Appendix 1

### Description of method for analysis of gender representation performed by Infomedia

Infomedia analysed the first dataset by means of Named Entity Recognition (NER) technology, identifying all individuals mentioned in each newspaper sample by the concurrent occurrence of a first- and surname. This resulted in nine lists of names, and thus identifiable individuals, who appear in each newspaper sample, amounting to a total of 15,061 names. These lists were then matched with name statistics on the most common first names in each country according to the databases of the three national statistics authorities to ascribe a gender. This was possible for the majority of the listed names (more than 75% across the total sample). The remaining names could not be ascribed gender automatically because they were either too unusual in the Nordic context to appear in the national name statistics, or because they were not names. The final sample thus amounts to 11,690 gendered names in total. A source of error in the NER technology that we could not correct is that it does not capture all individuals who are mentioned in the newspapers, for example, if they only appear by first- or surname. Finally, we cannot, with this dataset and method of analysis, identify what role the individuals behind the names have in the stories, so they may also be, for example, photographers, but since this is the same for all included newspapers, we find this source of error to be acceptable considering our purpose.

## Appendix 2

### Selected Scandinavian newspapers in first dataset

Paper type	Danish	Norwegian	Swedish	Time period
Tabloid	Ekstra Bladet	Dagbladet	Aftonbladet	7 + 13–19 January
Broadsheet	Jyllands-Posten	Aftenposten	Svenska Dagbladet	14–20 January
Specialised	Børsen	Dagens Næringsliv	Dagens Industri	14–20 January

## Appendix 3

### Gender split of represented individuals in newspapers, January 2023 (n = 11,690)

Country	Newspaper	Women (%)	Men (%)	Difference (%)
Denmark	Ekstra Bladet	21	79	58
	Jyllands-Posten	24	76	52
	Børsen	24	76	52
Norway	Dagbladet	29	71	42
	Aftenposten	31	69	38
	Dagens Næringsliv	23	77	54
Sweden	Aftonbladet	28	72	44
	Svenska Dagbladet	28	72	44
	Dagens Industri	28	72	44

## Appendix 4

Proportion of women represented in first and second datasets

	<b>Proportion of women appearing in first dataset (automated/Infomedia) (%)</b>	<b>Proportion of women appearing in second dataset (manually coded) (%)</b>
Ekstra Bladet (DK)	21	27 (n = 1,582)
Jyllands-Posten (DK)	24	23 (n = 3,171)
Dagens Industri (SV)	28	26 (n = 1,510)

## Appendix 5

**Share-of-voice, as measured in quotes per appearance total (n = 4,292)**

<b>Category</b>	<b>Gender</b>	<b>Average</b>	<b>Lower Bound</b>	<b>Upper Bound</b>	<b>n</b>
All	Men	3.44	2.60	4.29	3,209
	Women	3.09	2.54	3.64	1,083
Jyllands-Posten	Men	3.45	2.73	4.18	1,727
	Women	3.09	2.54	3.64	513
Dagens Industri	Men	3.80	3.00	4.61	795
	Women	3.19	2.48	3.90	271
Ekstra Bladet	Men	3.08	2.65	3.51	687
	Women	3.02	2.47	3.57	299