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Triangulating visual and textual corpus-assisted discourse analysis to study social actor representations: the case of Saudi women in the British and Saudi news media

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Abstract

Investigations of social actor representations across media present a large and important body of research in corpus-assisted discourse studies (CADS). Yet, most studies focus exclusively on one mode, the text, while other modes of communication, for example, visuals are either considered partially or not at all. While insights from textual analyses are invaluable in revealing salient and nuanced patterns of social actor representations in the media, visual accompaniments can reinforce particular 'angles' creating lasting perceptions on readers and viewers. Though some approaches exist to study considerable amounts of images, visual media data can be complex rendering them difficult to be studied alongside textual CADS. This article uses a triangulation of visual and textual CADS analysis to explore social actor representations in media texts and images. It does so by focusing on the representations of Saudi women in the UK and Saudi news media within the context of evolving women's rights in Saudi Arabia. The study shows how such triangulation can be conducted in a doable and systematic way and how it can enrich CADS research on discursive representations of social actors across contexts.

1. Introduction

Recognizing the current omnipresence of the visual mode in media texts, several scholars have called for a stronger consideration of images alongside written texts when analysing media discourse (e.g., Bednarek, 2016; Caple, 2017; Machin & van Leeuwen, 2016). Images play a prominent role in communicating and disseminating meanings to wider audiences (Bednarek & Caple, 2017) impacting how readers understand and react to media stories and what kind of beliefs and associations they form, for example, of individuals and social groups (Ledin & Machin, 2020).

There is now a large body of research on social actor representations across various media genres, contexts and times. Many of the studies have adopted the tools and methods of corpus-assisted or corpus-based discourse analysis and have provided robust evidence for the existence of particular and often disadvantaging ways in which people belonging to minoritized or marginalized social groups have been represented (e.g., Caldas-Coulthard & Moon, 2010; Gabrielatos & Baker, 2008; Jaworska, 2016; Jaworska & Hunt, 2017; Taylor, 2014; Zhang & Caple, 2021). Despite the breadth and depth of this research, most studies on social actor representations have been exclusively monomodal, that is, have focused on one communication mode – the written language – while other modes of meaning making such as colour, body pose, and gaze have been given minimal or no attention.

There is a wide recognition that large-scale visual analyses present a considerable analytical challenge and not just for corpus-assisted discourse analysis. Images are complex and multi-layered rendering them difficult to study systematically in the way in which CADS research is conducted. When it comes to visual representations of people in particular, images can include different modes including colour, gaze, gesture and poses that are all carriers of meanings providing us with obvious and less obvious cues as to how to understand and interpret the depictions (Machin & Mayr, 2012).

Triangulation, which simply refers to the use of multiple methods, datasets and analysts to study a particular aspect or topic, is not a new territory in corpus linguistics, especially in corpus-based or CADS research, in which various forms of triangulation have been performed (e.g., Baker & Egbert, 2016; Marchi & Taylor, 2009). Yet, the triangulations have included mostly one mode, that is, written language (including transcriptions). There are several corpus linguists who have recognized the importance of other modes of communication (e.g., Adolphs & Carter, 2015; Knight, 2011), and some have already integrated the visual mode into corpus linguistics (Caple et al., 2020; Elyas et al., 2022; Sun & Chalupnik, 2022). The latter group often limits the

amount of images to be studied considerably, partially because of the complexity of visuals. Exploring a few selected images can help us understand something about visual representations of social actors. Yet, if we wish to conduct a visual analysis on par with CADS, reducing the material to a small subset of images raises three important methodological issues.

First, there are problems with sample selection, specifically which and how many images to choose to study in more detail. Selecting just a few cases might miss some salient visual representations. There is also the potential for cherry-picking, especially when images are selected after textual[1] corpus-assisted analysis has been completed. The researcher might be primed to select images that conform to textual findings, while visual representations other than those found in a text corpus might be overlooked. Secondly, working with a small sample of visual material poses challenges for an appropriate and meaningful triangulation of visual and textual results. The benefit of CADS is that it can provide evidence for the existence of salient but also more nuanced patterns of representations constructed through written language. Comparing results obtained in this way with findings from an analysis based on a few images presents a problem for a robust triangulation of results in that it will be difficult to ascertain which visual patterns of representations are salient and which ones align or diverge from representations identified in the textual analysis.

And thirdly, there is the related problem of generalizability. While corpus-based findings are typically considered to be more generalizable because they are often based on large text corpora, it is more difficult to generalize from a small visual sample. If we conduct a textual corpus-assisted analysis of social actor representations and complement it with an analysis of a few images, then the visual results might end up having more of an 'illustrative' or 'supplementing' role. While for some studies this might be enough, researchers interested in exploring how both modes – written text and image – portray a social actor in more comprehensive ways would need to expand their visual database.

An integration of visual analysis into CADS then ideally needs to consider the entire visual material that accompanies written texts and investigate it in a systematic way on par with principles of a corpus-based analysis. This in itself is a complex task but not impossible to accomplish. A good example is research by Bednarek and Caple (2014) who initiated such an integrative approach, describing it as a Corpus-Assisted Multimodal Discourse Analysis (CAMDA). In a later study, Caple et al. (2020) used their CAMDA approach to explore how one event, the National Day, is constructed as newsworthy in Chinese and Australia press using corpora of 100+ articles and 30-50 images.

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[1] When we say 'textual analysis', we mean analysis performed on texts composed of written words only.

Inspired by Bednarek and Caple's (2014), the present study introduces a researcher-friendly toolkit that attempts a meaningful and robust triangulation of visual and textual data to study social actor representations in media discourses. In doing so, it extends previous similar research on media representations of social events (Caple et al., 2020) to social actors and adds a visual data component to studies that have employed triangulation of corpus-linguistic methods (e.g. Baker & Egbert, 2016). Our purpose is to assist researchers who are interested in exploring how a social actor or actors are represented through the modes of text and image without the need to use complex programming skills as those involved in AI-based computer vision research (which is still in its infancy when it comes to a more nuanced 'reading' of images).

This paper aims to highlight some of the methodological concerns, adjustments and decision-making processes that we encountered when performing this kind of triangulation. In doing so, this articles responds to Egbert and Baker's (2016: 206) call for more 'high-quality methodological commentary' to improve and expand on the existing portfolio of corpus-linguistic methods, specifically when it comes to the triangulation of multiple methods and data. We do so by taking as a case study an exploration of how Saudi women have been textually and visually represented in the UK and Saudi Arabia (SA) news media within the context of evolving women's rights, including the driving rights granted to women in SA in 2018.

2. Social actors in the media

Positioning in news stories is primarily achieved by a recontextualization of what particular journalists, their institutes and audiences deem as socially and ideologically newsworthy representations of social practices and social actors (van Leeuwen, 2008). Recontextualization can happen through both written text and images. Van Leeuwen (2008) argues that with the increasing use of visuals in a wide range of contexts, it becomes more and more pressing to ask the same critical questions with regard to both verbal and visual representations. It becomes vital to compare how different modes are utilised and for what purpose since both can foreground or hide particular meanings (cf. Kress & van Leeuwen, 2020). In studying how images depict people, van Leeuwen (2008) recommends that researchers ask two questions: (1) 'How are people depicted?' which mostly entails social actor analysis of agency and (2) 'How are the depicted people related to the viewer?' (p. 137) which focuses on social actor gaze, distance, and camera angle. Machin and Mayr (2012) clarify that when analysing agency, the analyst should focus on three aspects of visual meaning: (1) the participants and their role as either agents or patients, (2) the action itself, and (3) the circumstances, or context, associated with the action.

Van Leeuwen (2008) argues that it is essential to ask what the social actors under study are actually doing or not doing, as well as what they might have been doing or not in reality, which

is not shown in the captured image at that moment of time. Ledin and Machin (2020) remind us that images accompanying news stories are mostly still images that capture a particular moment in time acting as indexical signs. This is essential to consider as portraying people too frequently in certain ways and roles may symbolically limit them to few, effectively essentializing identities. This often happens when media and other organizations use stock photographs of women from commercial image banks such as *Getty Images* or *Shutterstock* (e.g., Aiello & Woodhause, 2016; Albawardi & Jones, 2021).

Images included in media stories influence the ways in which readers/viewers perceive conveyed topics priming them to interpret them in a particular way. Studying the visual material and how it recontextualizes social actors along the words that characterize them in texts is therefore important if we want to better assess how social actors are represented and the extent to which these representations depict them as empowered social agents, or not. In doing so, we will be in a better position to understand what kind of social 'realities' media, as powerful institutional agents, construct and disseminate to large audiences, and their role in perpetuating essentializing and stereotypical representations (Kress & van Leeuwen, 2020; Ledin & Machin, 2020).

3. Saudi women representations in the news

Because the case study presented here is concerned with media representations of Saudi women, a brief overview of relevant studies is offered to situate the current study within its research context. One of the most recent examples is Alshahrani's (2022) study that is based on 178 BBC news articles published between 2008-2018. This research revealed different representational (sub)categories of Saudi women when compared to Saudi men. Seven gender inequalities were identified including Saudi women being overwhelmingly represented as 'covered, dominated and oppressed' (Alshahrani, 2022: 1). Female activists and trendsetters were foregrounded, while female political figures tended to be marginalised. These findings are in line with previous literature on Saudi women representations in the Western press; in particular the focus on the veil and portrayals of passive, unhappy and oppressed non-agents/victims seems to dominate textual representations of Saudi women, while their everyday achievements are rarely acknowledged (Elyas & Aljabri, 2020; Karimullah, 2020; Mishra, 2007).

While most research on media representations of Saudi women has analysed texts, Elyas et al. (2022) conducted a small-scale visual analysis comparing the UK and SA press. The study concluded that black colour dominated the representations of Saudi women in British newspapers, whereas in the SA press, black attire was barely noticeable and Saudi women were

depicted more frequently as active social agents. Bashatah (2017) too investigated how Saudi women were framed in texts and images in four major UK newspapers from 2005-2013 and in relation to the driving ban. 43 photos were collected from 53 news articles and both texts and images were analysed. Among the author's many findings was that textually, the news stories highlighted Saudi women's inferior status rather than their efforts to break out of the traditional norms. This was reinforced visually; 70% of the 43 photographs foregrounded veiled women and did not focus on the central issues around protesting or driving.

Similar findings were reported in an earlier study by Al-Hejin (2012) who compared press coverage of the *BBC* (3,269 articles) and the *Arab News* (3,111 articles) between 2001-2007. The analysis was supplemented with a small scale visual analysis (6 images of Saudi/Muslim women) published by the *BBC*. The author found that women's attire was visually foregrounded though it bore no relevance to the context of the news; Saudi/Muslim women were predominantly framed as 'passive, submissive and unwilling or unable to improve their own wellbeing' especially if they continue to wear the hijab (Al-Hejin, 2012: 179).

The majority of studies on the representations of Saudi/Muslim women have brought to light the preponderance of negative news values (Bednarek & Caple, 2017) that perpetuate a stereotypical, essentialist and Orientalizing (Said, 1978) portrayal of women in/from the Middle East. Such representations take precedence over more positive or empowering portrayals. Given the recent changes in Saudi Arabia that have contributed to improvements in the status of women (e.g., removing the guardianship rules and ban on driving), it is important to assess whether essentializing and disadvantaging attitudes continue to prevail or whether more positive portrayals began to emerge. The current study is part of a larger undertaking that aims to achieve precisely that. For the purpose of this article, we focus on the methodological framework that endeavours to extend CADS research on the representations of women (e.g., Al-Hejin, 2012; Sun & Chalupnik, 2022) by integrating an analysis of a large visual database.

The toolkit for our mixed-method approach presented below is conceptually grounded in van Leeuwen's (2008) framework for studying visual and textual representations of social actors. As such, we begin by outlining the methodological decisions involved in selecting and extracting textual and visual data. Since the kind of analysis suggested here is best carried out with a reasonably simple categorisation scheme and with fewer categories, we discuss how we adapted van Leeuwen's (2008) framework to arrive at suitable categories for the analysis. We then demonstrate how our approach has been applied in practice by focusing (for reasons of space) on one dimension of the representations of Saudi women in the UK and SA news media, that of agency.

4. Triangulating visual analysis with CADS: Principles and analytical components

There are five main procedural components that triangulation of visual data into CADS may involve (see Table 1): (1) development of research questions, (2) identification of the social actor(s) and delineation of the relevant context and contextual criteria, (3) a large-scale quantitative and qualitative visual analysis, (4) a large quantitative and qualitative textual corpus-assisted analysis, and (5) triangulation of results obtained from (3) and (4) for a more comprehensive understanding of social actor representations.

PHASE 1: Developing Research Questions	
Outlining initial research questions (e.g., how is social actor X represented in corpus Y or what are differences and similarities in representations of social actor X in corpus Y compared to corpus Z?); as the analysis progresses, research questions might be refined in an iterative way to address the kinds of representations that emerge.	
PHASE 2: Social Actor(s) in Context & Data Collection	
a. Defining contextual criteria for data collection, examples can include (but are not exclusive to): - social actor(s) to be investigated and the possible ways in which the social actor(s) in question might be described, referred to, or labelled - type(s) of representation(s) (e.g., Role Allocation) - the particular discourse, genre or register and their context of production - the socio-political context and/or relevant socio-political events if applicable - time span **b.** Ethical considerations including details of data sources (e.g., links) and description of procedures of data collection **c.** Extraction of relevant visual and textual data (or other data if relevant)	
PHASE 3: Visual Analysis	**PHASE 4: Textual Analysis**
a. Coding using an adaptation of van Leeuwen's (2008) framework to investigate salient visual patterns of representation; ensuring validity and reliability through interrater(s) if possible **b.** Methods of analysis: Raw frequencies and Chi-square statistics	**a.** Investigating salient textual patterns of representation using an adaptation of van Leeuwen's (2008) framework **b.** Methods of analysis: Collocations and concordance lines; logDice is a suitable metric for comparative analyses
PHASE 5: Comparisons of Salient Patterns of Representations Across Modes	
a. Comparisons of salient patterns of representations across modes and what they tell us overall about the representation(s) of studied social actors; considering what kind of representations are more or less salient and in which mode; this can be done through quantitative and qualitative comparisons **b.** Identification of social practices and ideologies that underlie identified patterns of representations.	

Table 1: A framework for triangulating visual analysis with CADS

4.1 Phase 2: Social actors in context and data collection

When embarking on the analysis of social actor representations, several steps need to be performed first in order to delineate the context for the analysis and collect relevant data. The initial steps are outlined here and demonstrated 'in action' in sections 4.2 and 4.3. In the first instance, the researchers need to engage with the context to be investigated. This involves identification of the social actor(s) whose representations will be explored and the possible ways in which the social actor(s) in question might be labelled or described. This is important for defining search terms to extract relevant data. Researchers embarking on social actor analysis

often have a good understanding of possible 'labels' but might want to refine their selection in an iterative way by reading a small subset of relevant data. A subsequent corpus analysis of texts might also shed light on items that were perhaps not considered but are, for example, fairly frequent and thus good candidates for further explorations.

Comparing representations across socio-cultural and linguistic contexts, as preformed below, presents a particular challenge since equivalents might be difficult to establish or simply be non-existent rendering exact comparisons difficult (cf. Taylor, 2014; Taylor & Del Fante, 2020). In any case, it is recommended to choose referents that are used in a specific culture and language, while direct translations as, e.g., the ones offered by dictionaries, should be avoided as they might not reflect the actual usage. Subsequently, the particular discourse, genre or register (e.g., news media) needs to be selected considering the processes of how the chosen discourse type or genre is produced, including questions around production formats, participation frameworks and audiences (Jones et al., 2020). Here too, cross-linguistic or cross-cultural analyses might be more challenging since direct equivalence in terms of discourse types or registers might not exist. For example, in the UK media landscape, tabloids or middle-range tabloids play quite an important role, while this kind of news outlets do not exist in SA.

An important part of exploring social actor representation is the identification of the actual categories to explore. Van Leeuwen's (2008) framework offers a comprehensive set of categories, yet, not all of them might be relevant or applicable to a specific context, especially if the context is outside the socio-political and cultural West. For example, in our case study, we had to make some adjustments to better reflect the kind of events or actions that were depicted in the visual data produced in SA media (see section 4.2). And finally, researchers need to consider ethical matters involved in data collection and corpus construction. Although corpus builders are encouraged to make their corpora available to other researchers 'in the interests of replicability' (McEnery & Hardie, 2012: 66), this can be at times problematic due to copyright issues.

Contacting the copyright holder and getting permission or limiting the collection of data to only sites that permit re-using of texts can offer some solutions. However, when it comes to media texts, this might be difficult, simply because a media product is, in most cases, multi-authored; therefore, obtaining permissions might require approvals from different participants involved in the media production ranging from editors to journalists, and the 'success rate' is usually quite low. We can still collect data for the purpose of a corpus compilation but in the absence of copyright permissions, corpora must not be distributed. In the interest of replicability, researchers can make accessible a list of website links from which data was sampled and provide

details of the procedures employed to collect texts so that others can replicate the procedures (McEnery & Hardie, 2012). Links to all websites from which data was collected for the study discussed here can be accessed via this link[2].

4.1.1 Data collection

The initial plan for this research was to collect a large corpus of news stories about Saudi women in the context of evolving rights in Saudi Arabia and to use CADS to ascertain whether the 'usual' Orientalist and undermining representations prevail or are perhaps changing. When engaging with the relevant textual data, it became evident that most news stories 'co-occurred' with an image or sometimes a few images. Since the images were foregrounding particular characteristics of Saudi women, it was felt that ignoring those visual representations would produce incomplete results when it comes to the media representations of the social actor in question. The decision was therefore made to collect and study the accompanying images in detail. Importantly, the images were the first 'artefacts' that a reader would normally encounter since most were prominently displayed either right above or immediately after the headline or in the vicinity of the lead paragraph (see Table 2). This prompted us to begin with the visual analysis first.

Corpora	No. of articles	No. of articles with images	No. of articles with images displayed prominently
UKV	233	184	150 (81.5%)
SAV	717	529	528 (99.8%)

Table 2: Number and placement of images in the collected news articles

For the current study, two key geographical areas were targeted – the UK and SA. This comparative case study aimed at better understanding how the 'other' country represents Saudi women and what kind of attitudes were disseminated in the UK news media given the evolving rights that were changing women's status in Saudi Arabia. Four corpora were built in total; a textual (UKT) and visual corpus (UKV) comprising data from UK newspapers, and a textual (SAT) and visual corpus (SAV) with data from SA news sources. As far as the UK is concerned, news articles and images were collected from seven major national newspapers representing different political orientations (left- vs. right-leaning) and styles (tabloids vs. broadsheets) in an effort to represent the national print media. As for SA, relevant news articles were collected from three leading national Saudi broadsheets published in Arabic, which differ slightly in their socio-political orientations. Table 3 shows the political alignment, frequency, circulation range, and local rank of all the newspapers considered in this study (https://www.4imn.com/).

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[2] UK and SA news corpora https://ln5.sync.com/dl/06287f0d0/jem5rbt8-yr3t7cy5-qd8nitnw-tz8zpsuc/view/default/11394458950003

	Newspapers	Type	Alignment	Circulation Range	Rank
UK	*The Guardian*	Broadsheet	Left-leaning	300,000-400,000	1st
	The Daily Mail	Midrange-Tabloid	Right-leaning	+1,000,000	2nd
	The Telegraph	Broadsheet	Right-leaning	500,000-1,000,000	3rd
	The Independent	Broadsheet	Left-leaning	200,000-300,000	4th
	The Sun	Tabloid	Right-leaning	+1,000,000	6th
	The Mirror	Tabloid	Labour	+1,000,000	7th
	The Times	Broadsheet	Right-leaning	500,000-1,000,000	10th
SA	*AlRiyadh*	Broadsheet	Pro-government	100,000-200,000	3rd
	Okaz	Broadsheet	More liberal than *AlRiyadh*, less liberal than *AlJazirah*	100,000-200,000	5th
	AlJazirah	Broadsheet	Centrist	100,000-200,000	8th

Table 3: UK and SA newspapers from which news articles were collected

All data were collected from 1 September 2017 to 1 March 2019, when major events introducing new women's right in SA took place. These include: predicting the lift of the driving ban, the royal decree lifting the ban on women driving on 26 September 2017, women starting to drive on 24 June 2018 in SA, and reactions to the removal of the ban in 2019. For the UKT corpus, articles were collected utilising *Lexis Nexis UK* and the following search term:

Saudi AND (woman OR women OR female* OR girl OR lad*) AND (driv* OR car*)

Collecting articles for the SAT corpus proved more difficult as SA newspapers are not available on *LexisNexis*. An alternative way was developed using Google.com and its 'tools' feature which allows for specifying the news site and the timespan range. Below is an example of a search query in Arabic and its translation into English:

(قيادة OR قادت OR سياقة OR سياره OR تقود OR سائقة) AND (امرأه OR امرأة OR امرأة OR نساء OR أنثى OR اينات OR سيدة OR سيدات OR فتاة) AND (سيارة OR سيارتها OR سياره OR سيارات OR مركبة OR مركبات) site:https://www.okaz.com.sa/

(drive OR she drove OR driving OR she drives) AND (woman OR women OR female OR lady OR ladies OR girl) AND (car OR cars OR a/the car OR the cars) site:https://www.okaz.com.sa/

To ensure that only topical articles were included, each news story was manually scanned to make sure that issues pertaining to female driving in SA were the major topic. Images were manually collected using the copy/paste function, and saved in two MS Excel sheets. The fact that there are more articles in the SAT corpus than in the UKT corpus is not surprising as Saudi women are more 'newsworthy' in their local contexts. Table 4 presents an overview of UKT, UKV, SAT, and SAV.

Newspapers	UKT no. articles	UKT no. words	UKV no. images
The Independent	29	19,071	85
The Guardian	18	12,693	27
The Times	25	18,634	28
The Telegraph	18	11,281	43
The Daily Mail	112	67,966	239
The Mirror	13	3530	16
The Sun	18	3445	27
Total	**233**	**136,620**	**465**
Newspapers	SAT no. articles	SAT no. words	SAV no. images
AlRiyadh	218	124,886	248
AlJazirah	253	112,812	75
Okaz	246	82,766	246
Total	**717**	**320,464**	**569**

Table 4: The size of the corpora

4.2 Phase 3: Visual analysis

In order to devise a coding scheme to analyse the images, we adopted and adjusted van Leeuwen's (2008) framework. For illustrative purposes, we focus here on one category, that of agency, referred to as Role Allocation. According to van Leeuwen (2008), social actors may be involved in some action, in which case they would be characterized as possessing agency and therefore referred to as Agents, or they might be represented as not performing any action and thus categorized as Patients. Van Leeuwen (2008) further breaks down agents into two types, i.e., Transactive and Intransactive. Transactive agents perform actions that might have an effect on others, or on the world. Agents might also be involved in actions which do not have such effects; these are referred to as Intransactive.

While devising the coding scheme, two adjustments were made in order to account for contextual specificities that emerged from studying a smaller sample of images. The first adjustment considered Beneficialization, which van Leeuwen (2008) classifies as a form of Passivation. We noted that in many images, the social actors in question were shown being given training certificates or driving licenses. And although such representations were not portraying them as performing any actions, we considered such instances first important 'enablers' of their empowerment, a kind of pre-agency. We therefore classified such instances as part of Activation (see Figure 1). We also felt that this reconfiguration allowed us to represent more accurately how Saudi women were *becoming* more empowered agents in their particular socio-political context.
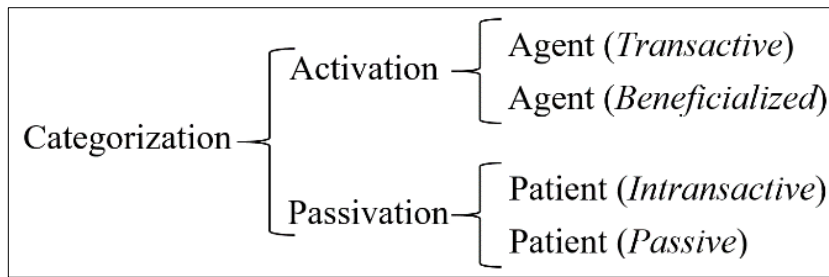
Figure 1: Van Leeuwen's (2008) adapted social actor Role Allocation network

The second adjustment regarded Intransactive social actors who, in this study, were considered Patients, rather than Agents. The rationale behind this is that in some situations, agents might be involved in actions that do not involve any agency; that is, their actions have no (immediate) effects on the world or others, such as Saudi women buying makeup. Therefore, in the current study, images of Transactive and Beneficialized Saudi women are considered representations of social actor Agency, while images in which Saudi women are depicted as Intransactive and Passive Patients are considered as representations of social actor Passivation. Figure 2 exemplifies these types of representations and how they were coded. The examples of re-categorisation show the importance of validating categorization schemes by considering contextual factors and a smaller amount of visuals.

Activation (AGNT)	Transactive Agent AGNT (TRAN)	Going into or coming out of the driver's seat, or holding the driver's seat door, walking in a car showroom or exhibition, possibly with the intention of buying a car, trying a driving simulator, or attending a car-related event	
	Beneficialized Agent AGNT (BENF)	Receiving a driving licence or certificate	
Passivation (PTNT)	Intransactive Patient PTNT (INTR)	Sitting in the back/passenger seat, getting into or out of a vehicle either from the back or passenger seat, or casually walking with no visible purpose	
	Passive Patient PTNT (PASS)	Saudi women captured standing or sitting often with no background	

Figure 2: Saudi women visual Role Allocation examples and codes

All extracted images were analysed quantitatively utilizing MS Excel sheets. Figure 3 shows an example of coding Role Allocation. If a photo exhibited one of the sub-category features, that cell was coded with a devised coding (e.g., AGNT for Agent, TRAN for Transactive). The data

was later transferred into SPSS, where the value of 1 was given if a subcategory in question was present in the image and 0 if it was absent.
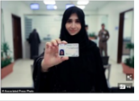
Images		Links	News	Activation vs. Passivation		
				Role Allocation		SPSS
1		https://www.independent.co.uk/news/world/middle-east/saudi-arabia-women-driving-ban-lifts-end-celebrations-licences-riyadh-jeddah-dammam-a8414591.html	BROD(INDP)	AGNT	(TRAN driving)	1
2		https://www.thetimes.co.uk/article/saudi-arabia-begins-new-crackdown-on-women-s-rights-x7mlp6gzv	BROD (TIME)	PTNT	(PASS)	0
3		https://www.telegraph.co.uk/news/2018/06/04/saudi-grants-first-female-driving-licences-ahead-ban-lift/	BROD (TELE)	AGNT	(BENF)	1
4		https://www.dailymail.co.uk/wires/afp/article-4927794/Leading-Saudi-womens-activist-vows-return-drive.html	TBLD (DAIL)	AGNT	(TRAN speaking)	1
5		https://www.theguardian.com/world/2017/sep/27/huge-step-jubilation-saudi-arabian-women-allowed-to-drive	BROD (GURD)	PTNT	(INTR)	0

Figure 3: Example of coding Role Allocation

To ensure the reliability of the devised coding system, an interrater fluent in both Arabic and English was employed. The coding system (see Figure 2) was carefully explained to the interrater; subsequently, the interrater and one of the researchers coded 30 images from different categories together to ensure that the interrater understood what the categories entailed. Next, the interrater proceeded to code all the images in both UK and SA corpora (1,034 images). The interrater's coding agreed with the researchers' to a large extent with only 13 discrepancies (98.7% agreement). While we felt that the coding categories and procedures were therefore robust enough for the purpose of this research, only one Arab interrater was selected, which might have influenced the high agreement.

Using SPSS, Chi-square tests were conducted to test whether any significant statistical differences emerged between UK and SA depictions of Saudi women agency in the news media. The Chi-square test was chosen because it is regarded as an appropriate statistical test for investigating categorical data (Bateman & Hiippala, 2020) and it was used in previous similar research (e.g., Sunderland & McGlashan, 2012).

Corpora	Images (N=1034)	Active and Beneficialized Agents (N=850)	Intransactive Agents and Passive Patients (N=184)	X^2	Sig.
UKV	465	390 (83.9%)	75 (16.1%)	1.603	.205
SAV	569	460 (80.8%)	109 (19.2%)		

Table 5: Chi-square comparisons for overall Saudi women Role Allocation

As can be observed, no evidence of significant statistical difference between the UKV and SAV news corpora was observed suggesting that visually both 2017-2019 UK and SA news media almost equally foregrounded Saudi women as active agents more frequently than as passivized patients. A more detailed qualitative investigation into the various types of Role Allocation has shown that women were visually represented predominantly as 'driving' agents or performing 'driving-related' activities; these representations were slightly more dominant in the UKV corpus (Table 6).

Corpora (N=1034)	driving	driving-related	work	speak	Total AGNT	Total BENF	INTR	PASS	Total PTNT
UKV (N=465)	227 48.8%	45 9.7%	9 1.9%	13 2.8%	294 63.2%	96 20.7%	35 7.5%	40 8.6%	75 16.1%
SAV (N=569)	208 36.6%	41 7.2%	36 6.3%	20 3.5%	305 53.6%	155 27.2%	17 3%	92 16.2%	109 19.2%

Table 6: Saudi women role allocation patterns in the visual UK and SA Corpora

Frequent portrayals of women driving were anticipated, as the novelty of Saudi women doing so for the first time renders such photos 'newsworthy' (Bednarek & Caple, 2017). In the SAV corpus, Saudi women were also shown as 'working' and 'speaking' (in almost 10% of the images), while this representation was minimal in the images included in the UKV (4.7%). One could argue that absence of other types of professional activation in the UKV limits news consumers' perceptions of Saudi women to only those women who are able to drive, while other professional activities performed outside the domestic sphere are nearly absent. Bashatah (2017) too found that UK newspapers did not focus on the variety of roles that women assume in SA society.

Overall, Saudi women were less likely to be visually depicted as agentless social actors; in the UK visual corpus only 16.1% and in the SA only 19.2% of images pointed to this kind of representation. A closer investigation of these images revealed that most of them were close/mid-shots of women directly gazing at the camera (see Figure 4). Although in such images women were not performing any actions, they were not exactly passive. People gazing directly at the camera are represented as more visible, confident and empowered 'demanding' acknowledgment from the viewer (Ledin & Machin, 2020; van Leeuwen, 2008). This appears to be the case in the images studied here as most of the 'agentless' visual representations showed Saudi women in such shots portraying them as confident.

UKV (26 out of 40, 65%)	SAV (74 out of 92, 80.4%)

Figure 4: Examples of Saudi women via close/mid-shots + direct gaze

4.3 Phase 4: Textual analysis

Collocations are useful tools for identifying patterns of representations in large collections of texts (Baker, 2020). Words that collocate with a social actor or actors in question can point to traits, characteristics and roles with which they are persistently associated, often perpetuating essentialising and stereotypic portrayals. From this, patterns around agency including activation, beneficialization, and passivation can be discerned. To explore the ways in which Saudi women were textually represented, we studied and compared collocates of 'woman' in the UKT and its equivalents in the SAT corpus.

Collocations are normally retrieved using frequency counts and a metric that establishes the strength or certainty of association with the word in question. There are a number of different metrics (see Gablasova et al., 2017 for an overview) but for our purpose, the logDice metric seemed particularly useful. Researchers interested in social actor representations often compare representations across corpora of different sizes; logDice is suitable for such an endeavour because and unlike other metrics, it is a standardised measure with a fixed maximum value of 14 and therefore ideal for comparing collocations across corpora of different sizes (Gablasova et al., 2017; Rychlý, 2014).

The question which arises is what cut-off point should be used to decide which collocations are typical and hence stronger or which ones are perhaps less typical and weaker. The lower the logDice score is, the weaker the association; 1 simply means that a collocation occurs twice as often, while 7 indicates approximately 100 times frequent collocation. Researchers studying representations of social actors have used logDice score of 7 or above as an indication of 'a strong collocational association' (Egbert et al., 2020: 26). For the purpose of collocation retrieval, we too used 7 as the minimum logDice score, 5 as the minimum frequency cut-off point and the span of 4 words to the left and 4 words to the right.

Three important issues emerged when completing this part of the study and these included: (1) finding equivalent language items referring to 'woman' in English and Arabic and deciding which words to include. This was achieved by using Word Sketch to determine which lemmas were most prominently used in each of the UKT and SAT. Based on this, in the UKT, only

woman was included because it was the most frequently used label and others were mentioned very rarely or not at all (e.g., lady). In the SAT, several words that frequently refer to an adult 'woman' were used and these included all singular and plural noun forms, with and without articles, of نساء\امراة [women] and سيدات [ladies]. The only term that was excluded was أنثى [female (as a noun)] since it only appeared a few times. There was also a need to (2) exclude terms that referred to non-Saudi women, and (3) exclude pronouns since in Arabic, feminine pronouns can refer to non-human entities as well. Once collocates were retrieved, we grouped them into various categories based on van Leeuwen's (2008) framework. As above, we focused here only on Role Allocation. All collocates were categorised into three groups in accordance with the kind of representation which they emphasised including Activation, Beneficialization or Passivation. This was based on a careful reading of concordance lines to determine how the collocates were used in context.

(1) Activation

UKT Transactive Agents (N=383, 42.9%)			SAT Transactive Agents (N=2082, 56.4%)					
Driving-Related (N=179 – 20.1%)			**Driving (N=1231 – 33.4%)**					
able	6	11.7	قيادة driving	698	11.0	القيادة drives	49	8.8
movement	11	9.7	قيادة drive	326	9.9	تقود drives	39	8.6
ability	9	9.4	تركب rides	7	9.9	مقود behind the wheel	5	8.0
get (a licence)	21	9.2	يقدن drive	29	9.8	سياقة driving	9	7.2
progress	8	9.2	تقود drives	69	9.7			
mobility	8	9.2	**Working (N=581 – 15.7%)**					
advocate	7	9.0	عاملة working	9	10.4	تسهم contributes	12	7.5
face	17	8.9	يعملن work	5	9.8	مشاركة participating	10	7.5
causes	5	8.6	العاملة working	38	9.6	قادرة able	9	7.5
start	11	8.3	العاملات working	8	9.5	دخول enters	9	7.4
want	10	8.2	تسهم contributes	9	8.4	توفر saves	7	7.4
celebrate	9	8.0	العمل work	95	8.3	اثبتت proved	8	7.3
apply *get a license*	7	7.7	تحمل bearing	6	8.3	تثبت proves	6	7.3
celebrate	6	7.7	دور role	61	8.0	تساعد helps	5	7.3
film	6	7.5	اثبتت proved	11	8.0	تعمل works	9	7.2
walk	6	7.5	تشارك participates	6	7.9	يمكن(ها) enables	8	7.2
pioneer	5	7.5	تحقق achieves	7	7.8	تستطيع has the ability	6	7.2
campaign	6	7.4	القيادية leading	61	7.6	المساهمة participating	6	7.2
go	6	7.4	مشاركة participate	50	7.6	تمارس exercises	6	7.2
participate	5	7.2	حققت achieved	11	7.6	رغبة wants	5	7.2
flee	5	7.2	عمل work	50	7.5	اصبحت become	7	7.0
leave	5	7.2	دخول entering	34	7.5	تشارك she participates	7	7.0
Driving (N=139 –15.6%)			**Driving-Related (N=191 – 5.2%)**					
drive	75	12.2	الراغبات want	29	10.3	تمارس to exercise	7	7.9
driving	22	12.2	حصلن got	7	10.0	تدفع pays	6	7.8
drive	10	10.1	اقبال approach	5	9.9	يحول transforms	8	7.7
take *to the road*	32	9.8	تمتلك owns	8	9.6	التدريبية training	7	7.6
Working (N=48 – 5.4%)			تحمل holds	12	8.6	استخدام use	10	7.6
study	9	9.4	تدريبية training	8	8.6	قادرة is able	9	7.5
participation	8	9.2	الحاصلات holding	14	8.2	تشمل includes	5	7.2
employment	6	8.8	حق right	50	7.8	تستطيع is able	6	7.2
empowerment	6	8.8	**Speaking/Presenting (N=79 – 2.1%)**					
work	8	7.9	قالت she said	36	7.8			
educate	6	7.7	اضافت she added	24	7.3			
seek *work*	5	7.5	اوضحت she clarified	5	7.3			
Speaking/Presenting (N=17 – 1.8%)			اوضحت she clarified	7	7.0			
voice	7	9.0	اكدت she confirmed	7	7.0			
say	10	7.7						

Table 8: Collocates pointing to activation of Saudi women

Table 8 presents all collocations that highlighted female Activation in both corpora. As can be seen, characterisation of Saudi women as Transactive Agents was more frequently deployed in the Saudi news texts (56.4%) than in the UKT (42.9%). A more detailed qualitative examination of concordance lines revealed further differences in portrayals of active Saudi women in the two contexts. While both corpora represented Saudi women most frequently in actions pertaining to driving or related activities, the focus in the UKT was on activism, protests and campaigns to get the driving ban lifted. Table 8 shows that the UKT continued to foreground 'participating' Saudi women 'activists', 'campaigners', and 'advocates' who were being mistreated, penalised, and apprehended for 'filming' themselves while driving.

There is also a greater focus on oppression, barriers, backlash, etc. resulting in some women 'fleeing' or 'leaving' Saudi Arabia. And some of the collocates that seem to point to positive patterns of representations were actually used in negative contexts; for example, the discourse around 'movement', 'mobility' and 'ability' was mostly focused on curbs and limits, and 'celebrating' the right to drive is often preceded by reminders of past oppressions as in:

> number of women have been arrested for rebelling against it.\</s>\<s>Saudi Arabian **women celebrate** end of driving ban
> st two days since the ban was lifted.\</s>\<s>Long relegated to the back seat, Saudi **women celebrated** taking the wheel

Additionally, even a routine activity, such as 'studying', is frequently used with notions of requiring permission from men, examples:

> the father, husband or brother - must grant permission for a **woman's study** , travel and other activities.\</s>\<s>It was unclear
> system, a male family member must grant permission for a **woman's study** , travel and other activities.\</s>\<s>Saudi Arabian

A different discourse was observed in the Saudi corpus, in which collocates such as قادرة [capable] to drive and are حصلن [getting], اقبال ,اقبالا [applying for], or تمتلك [owning] driver licences, cars or are التدريبية [training] to drive and are استخدام [using] auto service centres were frequently used with Saudi women. In general, Table 8 shows that SAT characterised women as 'working' and productive members of society more frequently (15.7%) when compared to the UKT (5.4%).

(2) Beneficialization

UK2T Beneficialized Agent (N=361, 40.5%)			SA2T Beneficialized Agent (N=1562, 42.3%)					
allow	234	12.6	السماح allowing	479	10.6	تخدم serves	9	7.8
give	21	9.4	تشجع encouraged	5	10.5	تتمتع enjoys	7	7.8
include	16	9.0	العناية taking care	6	10.4	متنوعة varied	5	7.8
grant	10	8.4	موجهة geared towards	8	9.9	اصبحت become	16	7.7
make	11	8.3	يسمح are allowed	37	9.7	يعزز enhances	13	7.7
permit	8	8.1	تتناسب suitable	5	9.4	يحول transforms	8	7.7
need	9	8.0	تعليم are taught	164	9.3	التعليم offered education	9	7.6
get	8	8.0	توظيف employed	24	9.3	تقدم provides	9	7.6
empower	7	7.9	تعيين appointed	7	9.3	ايجابية positive *step*	7	7.6
let	7	7.9	تمكين empowering	142	9.2	يمنح grants	5	7.6
encourage	7	7.9	تستهدف targeted	7	8.9	يفتح will open	6	7.5
place	6	7.7	اهتمام taken care of	5	8.9	متخصصة specialized for	6	7.5
expect	6	7.7	تعريف educate	10	8.7	سمح allowed	12	7.4
issue	6	7.6	تساعد will help	10	8.6	صيانة safeguard	11	7.4
receive	5	7.2	مخصصة specialized for	8	8.5	صيانة preserving	7	7.4
			يمكن enables	30	8.4	توعوية awareness raising	6	7.4

تمكين empowering	19	8.4		حق right	51	7.3	
امنة safe environment	9	8.4		خدمة serving	30	7.3	
تصبح she becomes	7	8.4		تحمي protect	7	7.3	
تتمكن will be able	6	8.4		وظيفة offered a job	5	7.3	
جديدة new *step*	18	8.3		تمثل represents	5	7.3	
جاء came	17	8.3		التعاقد contract	5	7.3	
تخص specialized for	8	8.3		دعم supporting	41	7.2	
رعاية take care	6	8.3		تعزيز enhancing	33	7.2	
تدريب training	50	8.2		مكنت enabled	8	7.2	
منح grant	19	8.2		منحت granted	6	7.2	
الحاصلات acquired	14	8.2		الامنية security	6	7.2	
امكان able	10	8.1		الامنة safe	6	7.2	
تسمح allows	9	8.1		المناسبة suitable	5	7.2	
تعيش lives out	7	8.1		سمحت allowed	7	7.0	
الوظيفية offered employment	5	8.1		تدعم supports	7	7.0	
استقبال receive	24	8.0		الفرصة التعليمية offered education	5	7.0	
الاباحة permitting	11	7.9		تستحق deserves	5	7.0	
تعيش lives	8	7.9					

Table 9: Collocates pointing to beneficialization of Saudi women

Table 9 shows collocates that characterise women as beneficialized. There were slightly more collocates foregrounding such representation in the SAT (42.3%) than in the UKT (40.5%) news corpus. The emphasis of enablement is not surprising in the context of SAT given that lifting the ban has created new opportunities for women granting them a new level of independence. In both the UK and SA news media, we find that Saudi women were being 'allowed' to drive, and other similar collocates involving facilitating driving were detected in both corpora such as 'grant', 'give', 'permit', 'let', 'encourage', and 'enable'. However, looking at Table 9, we find that the SAT depicted Saudi women beneficialization in a variety of other ways such as being 'supported', 'empowered', and 'taken care of'; the latter could be interpreted as quite paternalistic, possibly implying that Saudi women were in need of help, when it came to learning how to drive, examples:

﴾ حق انساني و ليس رفاهية ". امر سام ب **تمكين المراة** من استخراج رخصة قيادة ل المركبات : صدر امر سام

و نساء , حيث يصب هذا القرار فى دعم و **تمكين المراة** السعودية و منح ها فرصة اكبر ل المشاركة الفاعلة فى

human right and not a luxury". A royal decree **empowering women** by allowing them to get licences to drive cars: A royal decree was

and women, as this decree supports Saudi **women empowerment** and provides her with a better opportunity to actively participate in

(3) Passivation

UKT Passivation (N=148, 16.6%)					SAT Passivation (N=46, 1.3%)		
Authoritative Subjugation (N=106, 11.9%)					**Authoritative Subjugation (N=6, .2%)**		
require	19	9.3	sentence	6	7.7	ايقاف detainment	6	9.7
arrest	19	9.2	prevent	6	7.7	**Social Subjugation (N=40, 1.1%)**		
bar	15	9.0	warn	5	7.5	تواجه she faces	18	8.2
detain	13	8.7	hold	5	7.4	تعاني she suffers	5	8.2
forbid	11	8.6				تمنع prohibits	8	8.0
prohibit	7	7.9				تحتاج needs	9	7.3
Social Subjugation (N=42, 4.7%)							
repression	10	9.5	keep	5	7.5			
fear	11	8.3	lack	5	7.2			
remain	11	8.3						

Table 10: Collocates pointing to passivation of Saudi women

When it comes to passivation, the SAT news press (1.3%) passivized Saudi women less than the UK press (16.6%). The almost complete absence of subjugating collocates associated with Saudi women in the SAT indicates the SA media attempted to focus more on present changes and future advancements rather than highlighting past challenges and inequalities. Another reason for obscuring the past could be due to issues relating to SA media censorship policies. Any support of past protesting, which according to the SA laws is a rebellious prosecutable act (Al-Sharif, 2017), may have been considered as too sensitive politically. As such, one could argue that the SAT press de-emphasised Saudi women agency when it comes to their role in making a fundamental social change towards more equality. This also points to the extent the SA news media will go to avoid publishing any news that may hint at societal disorder. On the other hand, this kind of representation was emphasised in the UK news, but the focus was mostly on Saudi women activists, their arrests and the punishment that they received for driving illegally including methods such as 'lashing', as shown in the following examples:

This was a solitary incident, which was later revoked, but lashing was emphasised in the UK news media in 12 articles suggesting that the news agencies found it newsworthy, possibly because lashing is associated with 'old' bodily and inhumane disciplining methods. In effect, SA was represented as one of those archaic countries that reverts to brutal forms of punishment that have long been banned in the geo-political West. This echoes Orientalising representations of the Middle Eastern countries as backward and uncivilised. While in the Saudi news any pointers to past protests were minimal, the media did not shy from representing negative news stories; there was, in fact, a heavy focus on issues and suffering that Saudi women face in everyday life as exemplified by the verbal collocates 'suffer', 'face' and 'need' in relation to a lack of transportation, the complications that it causes, and the harassment that children and women are subject to from male drivers.

4.4 Phase 5: Triangulation of results from visual and textual analyses

While the previous parts described steps undertaken to perform the visual and textual analysis separately, a triangulation involves joining, comparing and cross-checking perspectives, data, methods and results in order to obtain a more comprehensive, thorough and perhaps a more complete picture of how a social actor is represented in the given context(s) (cf. Egbert and Baker, 2016). To triangulate our results, we compared the salient patterns found in the visual and textual representations of Role Allocation.

Role Allocations Across Modes		UK		SA	
		Visual	Textual	Visual	Textual
Activated	Driving	48.8%	15.6%	36.6%	33.4%
	Driving-Related Action	9.7%	20.1%	7.2%	5.2%
	Working, Productive	1.9%	5.4%	6.3%	15.7%
	Speaking	2.8%	1.8%	3.5%	2.1%
Activated overall		63.2%	42.9%	53.6%	56.4%
Beneficialized		20.7%	40.5%	27.2%	42.3%
Passivized		16.1%	16.6%	19.2%	1.3%

Table 11: Representations of Saudi women's role: comparisons across the modes

As Table 11 shows, Saudi women were predominantly represented as active drivers in both the UK and SA news corpora. This was an expected finding given the nature of the socio-political context and period of time from which data were collected. Yet, in the UK corpus this representation was reinforced much more visually than textually, while the SA corpora gave almost an equal space to this kind of representation in both, texts and images. Saudi women were also represented as transactive social agents performing some type of activity related to driving such as getting drivers' licences, visiting car exhibitions, training to drive, and so on. This kind of representation was given more attention in texts in the UK corpus than in images, whereas a reverse pattern was observed in the SA corpora.

This form of agency representation included coding instances in which women were depicted as activists protesting for lifting the driving ban. This representation was almost absent in SA news outlets (in both texts and images), while the UK press clearly foregrounded activism, especially textually. Discourses of protest and activism were frequent in the UK media texts suggesting that this representation was highly newsworthy even though the actual protests were not current at that time, mainly taking place between 2011-2013. This is a similar finding to that of Alshahrani (2022) who also noted that depictions of Saudi female protesters were much more foregrounded in Western presses than other types of female agency.

Although to a lesser extent, Saudi women were activated as working members of society. This representation was more prominent in the SA corpora, especially in the news texts, which gave more attention to Saudi women's roles outside the home. The UK news stories treated it minimally in both texts and images. Also, the representations of Saudi women as speakers and having a voice were marginal in both corpora, yet slightly more attention to this representation was given in SA images. Interestingly, the types of issues voiced by Saudi women in the two news demographics were quite distinct. For example, in the UK news, Saudi women activists were both visually and textually foregrounded speaking and reporting on past injustices, while

in the SA media the focus was on speaking out about typical or challenging everyday issues for women. This ties in with the foregrounding of protests and activism, which was a dominant pattern in the UK media texts. This foregrounding might have to do with the ways in which the West has viewed feminism predominantly as a fight and a militant movement (Jaworska & Krishnamurthy, 2012). And while many of the achievements that led to more women's rights and equality are outcomes of protests and 'fights', the Western representations almost always focus on those and especially on protesting feminist leaders, while the 'quiet' work behind the scene of many members of the feminist movements have received little attention (Lewis, 2020).

Portrayals of Saudi women as beneficialized actors were dominant in textual representations in both UK and SA corpora. Numerous collocates of support and concern emerged in the form of discourses relating to the establishment of driving schools that were 'suitable', 'safe', and 'specialized for' women to learn, so they were 'educated', 'trained', 'encouraged', and 'enabled'. Such support was reinforced visually, especially in the SA media that highlighted, for instance, policemen assisting women in the streets and driving schools that frequently surfaced in the SAV. As for passivation, Saudi women were passivized less frequently overall, and the lower proportion of portrayals of Saudi women as action-less can be considered an encouraging finding as compared to trends identified in past studies. Yet, such representations were still more frequent in the UK news, and in both texts and images.

The aim of this paper was to demonstrate benefits of analysing large textual and visual corpora to study social actor representations with the view to arrive at more comprehensive analysis of the ways in which modes, such as text and image, reinforce or downplay certain representations. The comparison of salient representational patterns of Saudi women in the UK and SA news texts and accompanying images have showed that considering just one mode would have produced partial findings and limited interpretations. For example, if we were to study UK news texts only, we would have arrived at the conclusion that Saudi women are mostly represented as active agents but mostly so in driving-related and protesting activities. If we were to focus on images only, activation would still be the dominant form of representation but now in relation to being actual drivers (and not protesters anymore). Also, we would have formed the opinion that Saudi women were not often represented as beneficialized social actors although beneficialization was almost equal with activation when it comes to the textual representations.

CADS researchers studying social actor representations often compare news texts across contexts. If we were to compare the textual mode in UK and SA corpora only, the results would have indicated that agentless representations are nearly absent in the SA news coverage though they were reinforced visually. Needless to say, exploring just textual representations in the SAT

corpus would have resulted in findings suggesting that there was no activism in relation to the driving ban. In the same vein, studying only textual representations in the UKT corpus would have left us with the impression that there was a great deal of protests and severe bodily punishments, while we would have learned nothing about the everyday challenges and harassment that Saudi women were facing because of the ban. Such differences clearly demonstrate that what counts as newsworthy is culturally bound, reflecting salient local societal ideologies and agendas (Bednarek, 2019; O'Neill & Harcup, 2019). Pinpointing convergent and divergent representational patterns in texts and images across (cultural and demographic) contexts as we have done above, opens up spaces for further and more in-depth explorations.

5. Conclusions

The current study utilized a triangulation of visual and textual corpus-assisted discourse analysis to explore the representations of Saudi women in the UK and Saudi media. Triangulation is a powerful tool that can provide a more comprehensive and thorough picture of discourse (Egbert & Baker, 2016). We hope to have demonstrated that adding a large visual data component to the pool of corpus data and methods can further enrich our understanding of discourse by showing how each mode reinforces and downplays certain representations and how by exploring just one mode we can overlook some important patterns when it comes to the portrayal of social actors in the media.

Although the triangulation framework used for the purpose of this study facilitates a more comprehensive understanding of social actor representations, it is not without limitations. One of the shortcomings of the approach undertaken here is that it identifies overall patterns in two large but separate datasets and does not consider how the visual and textual modes interact at the level of news stories to construct representations in more multimodal ways. Future research would need to consider a stronger alignment and interaction between images and texts by investigating, for example, which collocations were used in which news stories and what kind of images accompanied the stories and what kind of representations the images reinforced.

Also, the research discussed here was completed by two researchers involving one inter-rater; all three brought to the process their subjectivities and experiences that have influenced the ways in which the data were coded and findings interpreted. Readers of the news stories might have arrived at different interpretations and associations after 'encounters' with the textual and visual data. Thus, future research would also benefit from adding another level of triangulation to the analysis, that of reception, and another set of methods including more experimental techniques as those employed, for example, by Hart and Fuoli (2020).

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