Islamophobia and Media Portrayals of Muslim Women: A Computational Text Analysis of U.S. News Coverage†

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Replication Materials: https://github.com/rochelleterman/worlds-women

Abstract
This article draws on the theory of gendered orientalism to examine portrayals of Muslim women in U.S. news media. I test two hypotheses concerning the quantity and substance of coverage. First, US news coverage of women abroad is driven by confirmation bias, whereby journalists are more likely to report on women living in Muslim and Middle Eastern countries if their rights are violated, but will report on women in other societies when their rights are respected. Second, stories about Muslim women emphasize the theme of women’s rights violations and gender inequality, even for countries with relatively good records of women’s rights. Stories about non-Muslim women, on the other hand, emphasize other topics. I test these hypotheses against new data from 35 years of New York Times and Washington Post reporting using novel computational methods. The results suggest that U.S. news media propagate the perception that Muslims are distinctly sexist, which in turn may shape public attitudes towards Muslims as well as policies that involve Muslims at home and abroad.

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“56 percent of Americans believe the Syrian refugees’ values are at odds with our values. That may not be wrong. If you are in this religion [Islam], you probably do have values that are at odds. … Uh, killing women for being raped, I would say is a bad idea. Yeah, I do. Hang me for it.”

Bill Maher, “Real Time”, November 20, 2015

“These kinds of conversations that we’re having aren’t really being had in any kind of legitimate way. We’re not talking about women in the Muslim world. We’re using two or three examples to justify a generalization — that’s actually the definition of bigotry.”

Reza Aslan, “CNN Tonight”, September 29, 2014

Introduction

Public hostility towards Muslims appears to be on the rise in the United States. The most common explanation for this disfavor centers on the perceived link between Muslims and terrorism, as well as the role of media in reinforcing this association in American public consciousness. Scholars have revealed that (1) Muslims are frequently associated with political violence and terrorism in various media outlets, and (2) these media portrayals influence public opinion of both Muslim-Americans as well as policies affecting Muslims at home and abroad.

However, recent findings suggest that the perception of Muslims as a cultural threat may be more deleterious than their association with terrorism. Public opinion data reveal growing anxiety about Islam’s compatibility with “Western” values of tolerance, acceptance and civility (Panagopoulos 2006), and people who believe that Muslims remain culturally distinct are more likely to have negative attitudes about them (Ciftci 2012). However, few studies have systematically examined the origins of this perception in media portrayals.
This study draws on the theory of gendered orientalism to identify a central media facet that perpetuates the stereotype of Muslims as a cultural threat, namely representations of women and gender inequality. According to the theory, American media coverage of Muslim women cast Muslim societies inaccurately as distinctly misogynistic, which reinforce general stereotypes of Muslims as uncivilized, barbaric, and a threat to Western values.1 While this argument serves as the bedrock for a vast literature spanning many disciplines, it has yet to be verified empirically against a large dataset. This study fills that gap using new data from 35 years of New York Times and Washington Post reporting about women abroad, along with novel computational methods that enable a systematic comparison of both the quantity and substance of media coverage.

There are two main findings. First, statistical analysis reveals that Muslim women (i.e. women from Muslim and/or Middle Eastern societies) are more likely to appear in the U.S. press if they live in societies with poor records of women’s rights, while non-Muslim women are more likely to appear if their rights are respected. This suggests a kind of confirmation bias, whereby Muslim women are associated with countries that violate women’s rights, whereas non-Muslim women are associated with countries that respect their rights.

Second, U.S. news media tend to frame reporting about women in Muslim societies around the specific issue of women’s rights and gender discrimination at the ex-

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1 Throughout this paper, I use the phrase “Muslim women” as shorthand to refer to women living in Muslim-majority or Middle Eastern countries. I do not presume to know these women’s religious identity. Due the predominate associations in American consciousness, however, I assume these women are “read” as Muslim by American readers. Nevertheless, as a robustness check, I use three different metrics throughout the analysis corresponding to Muslim demographics or the geographic region of interest.
pense of other issues. This framing is biased on two accounts. First, there is an intergroup bias insofar as the issue of gender discrimination is more prevalent in stories about Muslim societies than non-Muslim societies. Second, there is an interreality bias in the sense that this differential remains even after controlling for the real-world conditions of women in the reported country. In other words, stories about women in Muslim countries are more likely to feature content about systemic gender inequality, even for countries will relatively good records of women’s rights.

Together, the findings produce a more theoretically refined and empirically robust portrait of Muslim stereotypes in the U.S. media. They also contribute to longstanding debates in the realm of political communication concerning subtle or indirect media stereotypes and their influence on public opinion of groups and policies. Just as stories about crime have shown to shape public opinion of African Americans (Dixon and Linz 2000; Entman 1992; Gilliam Jr and Iyengar 2000; Hurwitz and Peffley 1997; Peffley, Shields, and Williams 1996) and social welfare policies (Gilens 1996a; Gilens 1996b; Kellstedt 2000; Valentino, Hutchings, and White 2002), stories about gender inequality may shape public opinion of Muslims and the War on Terror. Although it does not tackle media effects directly, this study contributes a substantial and necessarily piece by identifying a key mechanism whereby media portrayals construct stereotypes of Muslims as a cultural threat, while demonstrating the utility of novel computational techniques in studies of media bias.

**Media Stereotypes of Muslims and Public Opinion**

Generally speaking, Americans view Muslims much less favorably than other religious and racial minorities (Pew Research Center 2014). The most common explanation for this disfavor centers on the perceived link between Muslims and terrorism in the American public consciousness, incited by the attacks on 9/11 and the subsequent
War on Terror. Scholars have devoted special attention to the role of mass media in propagating and solidifying this association. Muslims are frequently portrayed as violent, aggressive, and drawn to terrorism in a range of media, including newspapers (Nacos and Torres-Reyna 2007; Powell 2011), cable news (Dixon and Williams 2015), TV and movies (Alsultany 2012; Shaheen 2003), and video games (Saleem and Anderson 2013). Even when these portrayals concern people in far off places, they have important implications for Muslim minorities in the West, as media consumers generally do not differentiate between Muslims at home and Muslims abroad (Kalkan, Layman, and Uslaner 2009; Sides and Gross 2013).

Importantly, a large number of correlational and experimental studies have demonstrated the impact of negative media portrayals of Muslims on public opinion (Das et al. 2009; Kalkan, Layman, and Uslaner 2009; Nisbet, Ostman, and Shanahan 2008; Saleem and Anderson 2013; Saleem et al. 2015). These media effects go beyond generic attitudes to support for specific policies. For instance, exposure to media stereotypes of Muslims as violent has shown to increase Americans’ support for public policies that harm Muslims, such as military action abroad and civil restrictions at home (Saleem et al. 2015; Sides and Gross 2013). In fact, media has shown to exert a stronger influence on public attitudes of Muslims than other informational sources (Kalkan, Layman, and Uslaner 2009), which is unsurprising considering that most Americans do not have direct contact with Muslims in their daily lives (Panagopoulos 2006).

However, while the majority of research has focused on the association of Muslims with political terrorism, recent findings suggest that public opinion is more impacted by the perception of Muslims as a cultural, not necessarily political, threat. Public opinion data reveal growing anxiety about Islam’s compatibility with Western values of tolerance, acceptance and civility (Panagopoulos 2006) This is important, because stud-
ies have shown that American feelings about Muslims are more closely related to cultural outgroups than racial/religious minorities (Kalkan, Layman, and Uslaner 2009). Furthermore, people who believe that Muslims remain culturally distinct from mainstream society are more likely to have negative attitudes about them and associate Islam with violence, terrorism, and extremism (Ciftci 2012). However, despite evidence that media coverage of Muslims has increasingly turned toward stories focusing on religious and cultural differences between Islam and Western culture (Moore, Mason, and Lewis 2008), few studies have systematically examined the origins of this perception – Muslims as a cultural “other” – in media portrayals.

**Islamophobia and Gendered Orientalism**

In the last three decades, a large theoretical literature has developed critiquing Western portrayals of Muslim and Middle Eastern culture, religion, and society. Much of this scholarship is indebted to Edward Said’s groundbreaking *Orientalism*, which critiqued historical Western representations of the “Orient” that were structured by Manichean binaries separating the civilized “West” from the barbaric “East” (Said 1979). For Said, the significance of orientalism went beyond mere representation. At its core, orientalism was (and is) a form of knowledge-production that affirmed Western cultural and political superiority, thus legitimizing colonial rule over Muslim lands in the name of modernity, civilization, and progress.

One of the most insidious aspects of orientalism concerns representations of women and gender relations, or what is referred to as “gendered orientalism.” Historically speaking, women’s oppression was a central trope in colonial discourse. Practices such as footbinding (Teng 1996), female genital mutilation (Wade 2009), and sati (Mani 1987) were considered reflections of the inherently barbaric and degenerate culture of colonized peoples. As part of their civilizing mission, European colonizers sought to
“free” these oppressed women from their traditional ways of life (Chatterjee 1989; McClintock 2013). In sum, gendered orientalism was crucial to colonial and imperial projects that have structured Western-Muslim relations in modern times.

Since 9/11, the study of orientalism has undergone a significant revival, driven by scholars who see “neo-orientalism” at work in the War on Terror and related political developments. The literature on gendered orientalism has been particularly rich, arguing that contemporary portrayals of Muslim women work to stigmatize Muslims as a cultural threat to Western values of freedom, tolerance, and equality. While the literature spans multiple disciplines, theoretical approaches, and empirical territory, scholars converge on three modal claims.

First, American media discourse is purportedly obsessed with Muslim women’s oppression, for which the veil is the ultimate symbol and case in point (Ahmad 2009; Macdonald 2006). Popular media outlets portray Middle Eastern and Muslim societies as uniquely or particularly misogynistic, especially compared to Western countries (Kumar 2012; Razack 2004). This misogyny is ascribed to Islam and/or Arab culture, which is presented as inherently sexist and discriminatory against women (Ahmad 2009; Bahramitash 2005; Razack 2004; Volpp 2000). Not only is this narrative simplistic and sensationalist, it conflicts with the reality of women’s lives insofar as it inaccurately portrays the degree and cause of Muslim women’s suffering (Abu-Lughod 2013; Razack

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2 Considering the centrality of women in colonial discourse, anti-colonial and self-determination movements also placed gender at the core of their ideology, using women’s bodies as the bearers for tradition, cultural authenticity, and national identity (Chatterjee 1993; Moallem 2005; Najmabadi 1991; Yuval-Davis 1993).

3 For helpful reviews, see Abu-Lughod (2001) and Charrad (2011).
Furthermore, it denies women’s agency by reducing their lives to a totalizing oppression (Mahmood 2011; Scott 2009), while demonizing Muslim, Arab, and Middle Eastern men as inherently barbaric and cruel (Bhattacharyya 2008; Puar 2007).

Second, American media discourse tends to compare the lives of Muslim women to those of Western women, who are portrayed, by contrast, as liberated and free of sexist constraints (Yegenoglu 1998). This dichotomy justifies a rescue mission by which Western feminists must “save” Muslim women from their oppressive religion, culture, or traditions (Abu-Lughod 2002). The “savior” narrative has been heavily denounced as paternalistic and imperialist (Abu-Lughod 2002; Cooke 2002; Mohanty 2003).

Third, the need to “save” Muslim women, bolstered by American media portrayals, is often used to justify undesirable political projects at home and abroad (Abu-Lughod 2010; Maira 2009; Razack 2008). The increased coverage of Afghan women post-9/11 is an oft-cited case in point (Cloud 2004; Fowler 2013; Hirschkind and Mahmood 2002; Klaus and Kassel 2005; Shepherd 2006; Stabile and Kumar 2005). One implication is that U.S. media coverage of Muslim women is closely related to public policies that concern Muslims generally, both at home and abroad.

In short, gendered orientalism concludes that American media coverage cast Muslim as distinctly misogynistic, which reinforce stereotypes of Muslims generally as uncivilized, barbaric, and a cultural threat to Western values. But while rising to the level of common sense in some disciplines, the argument is treated with suspicion in others, perhaps due to the literature’s general prioritization of theoretical innovation over empirical findings. Notwithstanding a number of rich qualitative studies, we have yet to see an empirical analysis that is able to test these claims against a large dataset.

Hypotheses

If the gendered orientalism argument were true, how would we know? This sec-
tion derives two falsifiable hypotheses from the theory. The first concerns the discursive binary separating oppressed Muslim women from their freer, non-Muslim counterparts. Few scholars of gendered orientalism would deny the existence of sexism or gender discrimination in Middle Eastern or Muslim societies. But they would argue that gender discrimination tends to be noticed more often when it occurs in Muslim societies than elsewhere, especially compared to Western countries, which are portrayed as havens for gender equality. In this way, media outlets are influenced by the stereotype associating Muslim women with societies that violate women’s rights, and perpetuate that stereotype via the kinds of stories that they publish.

This implies a testable hypothesis concerning the geographic focus in U.S. news reporting of women abroad. Muslim women are more likely to make the news if they live in societies that violate their rights. In other words, countries like Iran and Saudi Arabia are featured in greater quantities, while those nations with relatively good records – such as Malaysia and Tunisia – are featured less often. On the other hand, the pattern is reversed for stories about non-Muslim countries. Here, non-Muslim countries that do poorly on women’s rights – such as Lesotho and Solomon Islands – are ignored, while more egalitarian nations are put in the spotlight.

More formally, the effect of women’s rights on the likelihood of coverage is conditional on whether the country is Muslim or Middle Eastern (see Figure 1.) I call this the confirmation bias hypothesis, because it involves the tendency for media to report information confirming the idea that Muslim women live in societies that violate their rights, while disproportionately giving less attention to alternative possibilities. This is not to say that all stories about Muslim women are primarily about women’s rights. But if the majority of news portrayals of Muslim women are about women in Taliban-era Afghanistan (or other societies with poor respect of women’s rights), a reader might
build the association of Muslim women with a lack of rights regardless of the topic.

**Hypothesis 1A** Muslim women are more likely to make the news if they live in societies that violate their rights.

**Hypothesis 1B** Non-Muslim women are more likely to make the news if they live in societies that respect their rights.

Figure 1: Hypothesis 1 (Confirmation Bias)

![Diagram showing the relationship between Muslim and non-Muslim countries and news coverage of women’s rights](image)

- **Non-Muslim Countries**
  - Finland
  - Sweden
  - Denmark
  - ...
  - Lesotho
  - Solomon Islands

- **Muslim Countries**
  - Kyrgyzstan
  - Malaysia
  - Tunisia
  - ...
  - Saudi Arabia
  - Iran

Note: Arrows represent higher quantities of articles about women in Muslim vs. non-Muslim countries. Rankings and estimates are for illustrative purposes only.

The first hypothesis has to do with *quantity* of coverage. A second possible mechanism concerns the *quality* or *framing* of such coverage. According to the theory, not only are Muslim women more likely to make the news if they live in a country that discriminates against them, their entire lives are reduced to this supposed inequality (Abu-Lughod 2013; Ryan 2011). Even women who live in relatively egalitarian societies are portrayed as oppressed, if they are Muslim. Non-Muslim women, on the other hand,
are reported in greater dimensions and with more complexity.

This, too, generates a testable hypothesis. Coverage of women can assume a variety of content, from rights and equality to sports, fashion, politics, etc. If we believe the gender orientalist argument, however, we would expect coverage of Muslim women to feature a more concentrated discussion of one issue in particular – women’s rights and gender inequality – compared to coverage of non-Muslim women. We would also expect this disparity in content to be driven by bias, not the reality of women’s rights and gender discrimination on the ground.

**Hypothesis 2** All else equal, coverage of Muslim women focuses more on “women’s rights and gender discrimination” than coverage of non-Muslim women.

Note that, unlike the first hypothesis that involves an interaction effect (the relationship between women’s rights and likelihood of coverage is conditional on whether the observation is a Muslim country), Hypothesis 2 involves a more straightforward comparison of topical content. Here, we expect coverage of Muslim countries to focus more on “women’s rights and gender equality” regardless of their record on women’s rights. I label this the *reduction* hypothesis, since it claims that women in Muslim countries are reduced to their (lack of) rights.

**Data**

The primary data used in this study consists of all articles about women in non-U.S. countries, published in the *New York Times* and *Washington Post*, 1980–2014. Clearly, the inferences drawn from this data cannot be straightforwardly applied to American media writ large. With that reservation, there are three reasons to value this sample. First, the 35-year range includes enough temporal variation to validly test the hypotheses raised above; few other outlets cover that great a time period. Second, these two out-
lets are often considered “papers of record,” i.e. the most prominent, accurate, and influential of U.S. news outlets. Other media outlets, including print and television news, rely on the New York Times and Washington Post for their reporting (Schraeder and Endless 1998). Lastly, and importantly, these sources constitute a “hard test” of the hypotheses by virtue of their sober, and relatively liberal, reputation. We would expect to find anti-Muslim stereotypes in more sensationalist media outlets, as well as those with a more conservative outlook.4

Using the LexisNexis database, I downloaded all articles containing the subject term “women” from these two outlets during the specified time period. Subject terms are derived from LexisNexis’s SmartIndexing technology, which applies controlled vocabulary terms for different taxonomies such as subject, geographic region, language, etc. In addition to subject, documents are assigned country terms along with a relevance score that calculates how important or salient each country is to a document. Scores of 85 percent or higher indicate a major term. I assign each article to a single country using its most salient country term, if that term has a relevance score of 85 percent or higher. Articles with missing major country terms were discarded.5 Because this study explores how U.S. media represent women abroad, I discarded all articles that were primarily

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4 Public opinion data demonstrate that views towards of Muslims are divided among party lines, with Republicans having a more negative opinion (Telhami 2015). Although both the New York Times and the Washington Post have been criticized for their reporting of Muslims (most notably in the context of the Israeli-Palestinian conflict), other outlets – especially Fox News – are considered more hostile (Nacos and Torres-Reyna 2007, 107).

5 Some articles contained more than one major country term; in these cases, I took the term with the highest relevance score. These cases accounted for only 9 per cent of the corpus.

These data were then aggregated into a country-year data set, with each document assigned to an observation based on the year in which it was published and the country it concerned. The country-year data set includes all current and historic U.N. states, plus Palestine but excluding the United States, for a total of 199 countries and 6292 observations. County-years were assigned a regional classification loosely based on Hafner-Burton and Ron’s (2013) six regional groupings: Powerful West (West) with 28 countries; Asia (Asia) with 33 countries, including Pakistan; Latin America (LA) with 33 countries; the Middle East and North Africa (MENA) with 22 countries, including Afghanistan; Sub-Saharan Africa (Africa), with 46 countries; and the Eastern Europe / Central Asia (EECA) with 31 countries.

Modeling Hypothesis 1

The first hypothesis concerns the geographic distribution of U.S. media attention towards women abroad. When discussing the world’s women, which societies are fea-

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6 The exclusion of the United States warrants further explanation. There are both empirical and theoretical justifications for removing this set of articles. Empirically, the vast majority of articles in the New York Times and Washington Post are about the United States. In fact, approximately 88% of the original sample was devoted to domestic issues. Including these articles would risk biasing the statistical results in favor of the United States and its particular characteristics. Second, there is a theoretical trade-off involved, insofar as media consumers read domestic coverage very differently than foreign news coverage. Testing gendered orientalism in a domestic context would require filtering stories about Muslim women from non-Muslim women living in the United States. While it involves a significantly different empirical set up than the one used in this study, future research could explore this angle.

7 See Supporting Information for details on these groupings.
tured and which are ignored? Here, the dependent variable is likelihood of coverage, which is operationalized in one of two ways. The first is a simple binary, *Reported (Binary)*, indicating whether a country-year observation featured at least one article in the sample (true in 1451 cases). The second, *Reported (Count)*, is a count measure indicating the total number of articles published for that observation.

The main explanatory variable in Hypothesis 1 is the state of women’s rights protections for a given country-year. Estimating the real-world conditions of women’s rights is problematic due to the conceptual difficulties involved (Peksen 2011). While recognizing the limitations of such a measure, I rely on the popular Cingranelli-Richards Rights Index (CIRI), which culls data from the U.S. State Department’s annual human rights country reports. CIRI offers three variables capturing the notion of women’s rights as they are effected in law and practice: *Women’s Economic Rights*, *Women’s Political Rights*, and *Women’s Social Rights*. Each variable is an ordinal measure ranging from 0 (indicating that women’s rights were not guaranteed by law during a given year) to 3 (indicating that women’s rights were guaranteed in both law and practice.) The composite variable *Women’s Rights Index* estimates the overall situation of women’s rights by taking the mean of these three indicators for each observation.

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8 Of course, the U.S. State Department reports may themselves be biased. But this bias makes my findings even more revealing, because we would expect that U.S. news media follow a commensurate understanding of “women’s rights” with that used by the U.S. State Department. In other words, the following results shows U.S. news media are disproportionately focused on women from Muslim societies, even when accounting for a U.S.-centric understanding of women’s rights.

9 The *Women’s Political Rights* and *Women’s Economic Rights* variables are only available to 2011. The *Women’s Social Rights* variable is only available to 2004. For details on these measures, see the Supporting Information.
Hypothesis 1 claims that the effect of women’s rights protections on the likelihood of coverage is conditional on whether the unit of observation is a Muslim or Middle East country. Thus an interaction term is necessary for the model.\textsuperscript{10} The moderating variable is whether the observation is a Muslim or Middle Eastern country, and is operationalized in one of three ways: \textit{Percentage Muslim} captures the Muslim percentage of a population according to research by the Pew Research Center (2011). \textit{Muslim Majority} is a binary indicating whether the Percentage Muslim is 50 per cent or above. \textit{MENA} is a binary indicating whether a country is included in the Middle East and North Africa regional classification described above. I estimate models with all three variables to ensure that my results are robust to alternative measures.

I also include a number of controls that may affect the likelihood of coverage. One straightforward alternative explanation suggests that reporting about women is proportional to general news coverage. For instance, the \textit{New York Times} may publish a lot of articles about women in Afghanistan because they report a great deal about Afghanistan in general. To account for this possibility, the variable \textit{Country Reports} records the number of articles that appear in the \textit{New York Times} on particular country-year, including those that are unrelated to the subject “women.” We would expect that coverage about women is highly correlated with overall coverage for a given country-year.

On the other hand, reporting about women may exhibit special features that make it different from general reporting. Journalists may treat stories about women as “softer” news, requiring more personal interviews and field research than “hard” news

\textsuperscript{10} Clearly, respect for women’s rights is itself affected by whether the observation is a Muslim or MENA country. However, tests using variance inflation factors indicate that collinearity was not a problem in the models; furthermore, the results are robust across a number of specifications.
items. One implication is that reporters may find it especially difficult to report on women in authoritarian countries, which tend to restrict freedoms of speech, assembly, and the press. To account for this possibility, I include a *Democracy* variable from the Polity IV dataset’s Polity2 index, which is constructed by subtracting the 10-point autocracy index that measures the autocratic features from the 10-point democracy index that identifies the democratic characteristics of a polity (Marshall and Jaggers 2002). Therefore, *Democracy* ranges from −10 (most autocratic) to +10 (most democratic).

Journalists may also find it difficult to report on countries that are mired in domestic turmoil and violence. I include a variable *Instability* culled from the Banks Cross-National Time Series Data Archive composite index of political instability, which encompasses multiple indicators including riots, antigovernment protests, guerrilla attacks, general strikes, purges, government crises, and assassinations. Higher values denote greater levels of political unrest and violence. Finally, I include controls for *GDP per capita* (logged) using World Bank Development Indicators and *Population* (logged) using data from the United Nations. The rationale is that journalists find it easier to report about women in rich, populous countries, where it is easier to conduct field research and/or conduct interviews.

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11 This data is only available to 2013.
### Table 1: Probit Analysis of U.S. News Coverage of Women Abroad

<table>
<thead>
<tr>
<th></th>
<th>Reported (Binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Country Reports</td>
<td>0.002***</td>
</tr>
<tr>
<td></td>
<td>(0.0003)</td>
</tr>
<tr>
<td>Women's Rights Index</td>
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<tr>
<td></td>
<td>(0.065)</td>
</tr>
<tr>
<td>Muslim Majority</td>
<td>0.553***</td>
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<tr>
<td></td>
<td>(0.166)</td>
</tr>
<tr>
<td>MENA</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Muslim Percentage</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
<td>0.008</td>
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<td></td>
<td>(0.005)</td>
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<tr>
<td>Instability</td>
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<tr>
<td></td>
<td>(0.00002)</td>
</tr>
<tr>
<td>Population</td>
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<tr>
<td></td>
<td>(0.023)</td>
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<tr>
<td>GDP per capita</td>
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<td></td>
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<td>Women's Rights x Muslim Majority</td>
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<tr>
<td>Women's Rights x MENA</td>
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<td>Women's Rights x Muslim Percentage</td>
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<td>AIC</td>
<td>3361.712</td>
</tr>
</tbody>
</table>

**p < .001; ***p < .01; *p < .05

Robust standard errors clustered on country appear in parentheses.
Table 2: Negative Binomial Analysis of U.S. News Coverage of Women Abroad

<table>
<thead>
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<th>Reported (Count)</th>
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<th>Model 2</th>
<th>Model 3</th>
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<td>0.002***</td>
<td>0.002***</td>
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<tr>
<td></td>
<td>(0.0001)</td>
<td>(0.0001)</td>
<td>(0.0001)</td>
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<tr>
<td>Women's Rights Index</td>
<td>0.206*</td>
<td>0.248*</td>
<td>0.249*</td>
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<tr>
<td></td>
<td>(0.102)</td>
<td>(0.097)</td>
<td>(0.111)</td>
<td></td>
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<tr>
<td>Muslim Majority</td>
<td>1.339***</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.373)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>MENA</td>
<td></td>
<td>1.713***</td>
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<td></td>
<td></td>
<td>(0.389)</td>
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<td></td>
</tr>
<tr>
<td>Muslim Percentage</td>
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<td></td>
<td></td>
<td>1.469***</td>
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<td></td>
<td></td>
<td>(0.412)</td>
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<td>Democracy</td>
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<td>0.013</td>
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<td>(0.011)</td>
<td>(0.011)</td>
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<td>Instability</td>
<td>-0.00002</td>
<td>-0.00003</td>
<td>-0.00002</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00002)</td>
<td>(0.00002)</td>
<td>(0.00002)</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>0.640***</td>
<td>0.639***</td>
<td>0.631***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.024)</td>
<td>(0.024)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita</td>
<td>0.226***</td>
<td>0.189***</td>
<td>0.226***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.041)</td>
<td>(0.042)</td>
<td>(0.042)</td>
<td></td>
</tr>
<tr>
<td>Women's Rights x Muslim Majority</td>
<td>-1.088***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.246)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's Rights x MENA</td>
<td></td>
<td></td>
<td></td>
<td>-1.157***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.269)</td>
</tr>
<tr>
<td>Women's Rights x Muslim Percentage</td>
<td></td>
<td></td>
<td></td>
<td>-1.120***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.266)</td>
</tr>
<tr>
<td></td>
<td>(0.589)</td>
<td>(0.573)</td>
<td>(0.599)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3934</td>
<td>3950</td>
<td>3934</td>
<td></td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-3591.307</td>
<td>-3590.501</td>
<td>-3592.008</td>
<td></td>
</tr>
<tr>
<td>theta</td>
<td>0.837*** (0.056)</td>
<td>0.852*** (0.058)</td>
<td>0.836*** (0.056)</td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>7200.614</td>
<td>7199.003</td>
<td>7202.015</td>
<td></td>
</tr>
</tbody>
</table>

***p < .001; **p < .01; *p < .05

Robust standard errors clustered on country appear in parentheses.
I use statistical models that account for the cross-national time-series structure of the data. Because the panel data are highly correlated, I use generalized estimating equations (Zorn 2001). When modeling the dependent variable using Reporting (Binary), I use a probit regression. When modeling the dependent variable using Reported (Count), I use a negative binomial regression since this variable consists of over-dispersed counts.\footnote{Note that a tobit is inappropriate as coverage cannot assume negative values (Sigelman and Zeng 1999).} To deal with heteroskedasticity, all estimates use Huber-White corrected robust standard errors clustered on country. Time-variant independent and control variables are lagged by one year to mitigate simultaneity issues and lessen any incorrect direction of inference. The results are summarized in Tables 1 and 2.

The findings provide strong support for Hypothesis 1. The coefficients on Muslim
*Majority, MENA, and Muslim Percentage* are positive and significant, indicating that U.S. news media allot greater attention to Muslim societies in their reporting of women abroad. More importantly however, the interaction terms (i.e., *Women’s Rights* x *Muslim Majority / MENA / Muslim Percentage*), are statistically significant and negative. This suggests that the effect of women’s rights protections on the likelihood of coverage is conditional on whether the observation is a Muslim (MENA) country. Specifically, Muslim societies *that violate women’s rights* garner special attention, while the reverse is true for non-Muslim societies.

To help interpret these results, Figure 2 visualizes the marginal effect of *Women’s Rights Index* on *Reported (Count)* for countries with and without a Muslim-majority population.\(^\text{13}\) For stories about Muslim countries, the effect is *negative*, meaning that rights-violating countries are overrepresented in American news coverage (Hypothesis 1A). This is demonstrated by the right side of Figure 2, showing an estimated coefficient of -0.87. In other words, if a Muslim country improves its women’s rights protections by one point (on a scale from 0 to 3), it loses approximately .87 articles on average per year. In contrast, the effect is *positive* for non-Muslim countries, meaning that more egalitarian societies are featured (Hypothesis 1B). On average per year, non-Muslim countries *gain* about .2 articles as they improve one point in women’s rights protections.

The results suggest a bias when it comes to what stories the American news media considered worthy of publishing. Not only are women in Muslim and MENA countries represented more often and in greater quantities, they garner special attention if their rights are violated. This is not to say that all stories about Muslim women are pri-

\(^{13}\) Results are substantively identical for MENA and Muslim (percentage) indicators, as well as the probit model on the *Reported (Binary)* DV. Graphs made using code by Strezhnev (2013).
arily about women’s rights or gender discrimination. But, all else equal, Muslim women from relatively egalitarian societies are less visible than women in oppressive Muslim countries. One implication is that Muslim women are considered newsworthy to the extent that they experience discrimination. As an anecdotal illustration, there were 102 articles about women in Iran, but only 20 about Malaysia – a country that does significantly better on gender equality.

On the other hand, we witness a different dynamic occurring for stories about other societies, where stronger rights protections correlate with higher likelihood of coverage. The articles in this subsample tend to feature issues such as work-life balance, electoral politics, the feminist debate over pornography, individual accomplishments in business or the arts – issues that tend to correlate with a better overall situation for women’s rights. Again, this is not to imply that stories of systemic gender discrimination in non-Muslim countries are nonexistent, just that women living in relatively egalitarian societies are disproportionately featured. For example, there were 250 articles in the sample about France, while Solomon Islands, Tonga and Lesotho – some of the worst violators of women’s rights – received almost no attention.

Together, the results suggest a kind of confirmation bias, whereby the media tend to highlight sexist Muslim societies, in contrast to egalitarian non-Muslim societies in their coverage of women around the globe. The findings are robust across a number of specifications. First, to show that the results are not model dependent or due to extrapolation, I ran simpler models focusing on key variables of interest. Second, I estimated alternative models replacing the Women’s Rights Index composite variable with individual scores representing Women’s Political Rights, Women’s Social Rights, and Women’s Economic Rights, respectively. Lastly, I include a lagged dependent variable as a re-
gressor in the model to address the possibility of serial correlation.\textsuperscript{14} The results were substantively equivalent across all models.\textsuperscript{15}

**Measuring Substantive Focus**

While the above findings pertain to the *quantity* of coverage about women abroad, the second hypothesis pertains to the *quality* or *framing* of coverage. How does the substantive content of these articles vary depending on the society being covered? Articles about women can address a variety of content, from elections and protests to sports and fashion. But gendered orientalism claims that U.S. media coverage of women in Muslim and Middle Eastern countries is obsessed about one issue in particular: women’s rights and gender (in)equality.

Testing this hypothesis requires measures of the distribution of themes or topics in the corpus. Fortunately, recent advances in computational text analysis enable new tools to categorize and compare texts on a large scale (Grimmer and Stewart 2013). Among the most promising tools for social scientists is the probabilistic topic model, an algorithm used to code the content of a corpus of texts into substantively meaningful categories, or “topics,” using the statistical correlations between words in a corpus (Mohr and Bogdanov 2013). Topic modeling is a mixed membership model, meaning that it considers each document to be a mixture of many topics. For instance, a hypothetical document devotes 54 percent of its content to “Business and Work,” 14 percent of its content to “Women’s Rights and Gender Equality,” 7 percent of its content to “Marriage and Family,” etc.

\textsuperscript{14} Note that lagged dependent variables risk artificially suppressing the explanatory power of other independent variables (Achen 2000).

\textsuperscript{15} Reports of all models are included in the Supporting Information.
For the purposes of this study, topic modeling holds a number of advantages over other methods given the outcome of interest. The main benefit of this method is its ability to infer and analyze substantively meaningful categories (topics) with minimal assumptions and expense (Quinn et al. 2010). Unlike human-coder approaches, an automated topic model estimates topics from the observed data without assuming the substance, division, or keywords of topics beforehand. Thus it ameliorates the potential for confirmation bias. It is also fully replicable because it is fully automated, which is an important validity concern for content analysis (Neuendorf 2011).

An alternative workflow would be to categorize each document based on whether or not it pertains to women’s rights as a whole, and then calculate the proportion of articles in the “rights” category for each country-year. But this blunt metric flattens important dimensions of variation. Most articles about women have at least one mention of women’s rights and gender equality, but differ in the degree to which they emphasize this theme. The gendered orientalist argument claims that for Muslim and/or MENA countries, every story, whether about politics or sports or literature, is framed as a story about women’s rights. A mixed-membership topic model estimates the outcome of interest more directly, because it represents texts as a distribution over many topics, not just one category. This allows one to compare how one document compares to another in terms of its proportion – not just presence – of a topic. However, as a robustness check, I also applied document-level labels indicating whether an article (as a whole) pertains to women’s rights and gender equality using a simple word search strategy. This provides an alternative measure of the main outcome variable used in the models below.

**Data Preparation and Model Estimation**

To estimate the topic model, the corpus was preprocessed following the standard
recipe for automated text analysis. First, I removed capitalization, numbers, and punctuation. I then removed stop words, or those words that are extremely common but unrelated to the research topic, such as “and”, “or”, “the”, etc. Since I was more interested in general frames than specific events, I removed named entities from the text of the articles, including the names of specific people, locations, and organizations. The popular Porter Snowball II stemmer was applied to the corpus, reducing words to their stem or root (Porter 2001). Finally, I also removed sparse terms by discarding all words used in less than 10 documents out of the entire corpus. The final document-term matrix had 4531 documents, 7653 unique words and 1,007,249 total words.

To identify and explore thematic topics in the corpus, I use the Structural Topic Model (STM), developed to facilitate the analysis of metadata and topics in text corpora (Lucas et al. 2015, 2). STM extends the popular topic modeling tool Latent Dirichlet Allocation (LDA) by incorporating document-level metadata into the analysis as covariates. This allows scholars to measure systematic changes in topical prevalence according to changes in metadata, similar to a regression framework (Roberts et al. 2014, 5).

16 I identified using Stanford’s Named Entity Recognizer (Finkel, Grenager, and Manning 2005) as well as my own dictionary of nationalities.
17 I use the R package stm to estimate the model (Roberts et al. 2014). Details on model selection are contained in the Supporting Information.
Table 3: Summary of Topic Labels

<table>
<thead>
<tr>
<th>Labels</th>
<th>Probability</th>
<th>FREX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Business</td>
<td>said, work, compani, year, percent, job, busi, worker, million, market</td>
<td>compani, bank, industri, factori, employ, market, employe, busi, corpor, manag</td>
</tr>
<tr>
<td>2 Sports</td>
<td>team, women, game, play, world, said, olymp, sport, player, first</td>
<td>game, olymp, sport, player, soccer, athlet, coach, team, medal, championship</td>
</tr>
<tr>
<td>3 Public Health</td>
<td>cancer, health, women, doctor, said, hospit, aid, breast, clinic, year</td>
<td>cancer, infect, patient, clinic, virus, hospit, doctor, surgeri, breast, health</td>
</tr>
<tr>
<td>4 Fashion</td>
<td>black, dress, one, cloth, wear, design, street, fashion, citi, white</td>
<td>restaur, jacket, shirt, color, skirt, blue, worn, cloth, fashion, pant</td>
</tr>
<tr>
<td>5 Arts</td>
<td>film, book, show, art, work, stori, life, one, play, write</td>
<td>film, artist, novel, art, museum, theater, movi, charact, fiction, reader</td>
</tr>
<tr>
<td>6 United Nations</td>
<td>women, said, will, right, confer, organ, group, world, issu, govern</td>
<td>confer, deleg, forum, organ, meet, intern, secretari, peac, committe, statement</td>
</tr>
<tr>
<td>7 Sexual Assault</td>
<td>said, polic, rape, case, report, sexual, violenc, victim, court, crime</td>
<td>rape, crime, victim, sentenc, crimin, polic, gang, prosecutor, convict, violenc</td>
</tr>
<tr>
<td>8 Combat</td>
<td>said, war, militari, kill, attack, soldier, women, forc, two, combat</td>
<td>soldier, troop, bomb, armi, militari, combat, command, civilian, gun, camp</td>
</tr>
<tr>
<td>9 Women’s Rights and Gender Equality</td>
<td>women, men, femal, law, right, chang, male, equal, mani, issu</td>
<td>equal, male, gender, femal, discrimin, men, women, law, status, chang</td>
</tr>
<tr>
<td>10 Politics</td>
<td>polit, minist, govern, elect, parti, presid, said, vote, leader, prime</td>
<td>elect, vote, minist, prime, parti, candid, voter, cabinet, politician, polit</td>
</tr>
<tr>
<td>11 Profiles</td>
<td>year, mrs, work, school, first, mother, said, student, husband, children</td>
<td>mrs, student, colleg, graduat, career, school, degre, teacher, univers, becam</td>
</tr>
<tr>
<td>12 Human Interest</td>
<td>said, like, say, one, peopl, just, want, get, can, think</td>
<td>know, think, feel, thing, someth, reali, see, lot, tell, just</td>
</tr>
<tr>
<td>13 Marriage &amp; Family</td>
<td>famili, girl, women, husband, said, children, villag, live, marri, marriag</td>
<td>villag, marriag, famili, rural, bride, marri, girl, shelter, husband, wive</td>
</tr>
<tr>
<td>14 Religion</td>
<td>said, islam, religi, right, church, ban, law, countri, women, practic</td>
<td>islam, religi, religion, secular, veil, circumsis, fundamentalist, church, genit, koran</td>
</tr>
<tr>
<td>15 Reproductive &amp; Personal Health</td>
<td>abort, studi, women, said, research, use, percent, report, birth, rate</td>
<td>abort, pill, contracept, fertil, implant, hormon, research, studi, method, data</td>
</tr>
</tbody>
</table>

Note: words are stemmed (see above).
The final model estimated 15 topics by regressing topic prevalence on region and year covariates. Table 3 gives a summary of those topics, including hand-applied labels of each topic’s semantic meaning, as well as top (stemmed) words calculated by frequency and simplified frequency-exclusivity scoring (FREX) (Lucas et al. 2015, 5)\textsuperscript{18}. One can see a clearly discernible topic corresponding to “Women’s Rights & Gender Equality” in this corpus, as inferred by the word stems “right”, “equal”, “discrimin”, “status”, etc. Figure 4 gives a corpus-level summary of topic distributions. The most common topics are “Women’s Rights & Gender Equality” and “Human Interest,” with the aver-

\textsuperscript{18}In brief, frequency scoring finds the most likely words in each topic. Frequency-exclusivity scoring finds the words that are likely to appear in a given topic and that are also unlikely to appear in any other topic. Both are heuristics that assist interpretation, as detailed in the Supporting Information.
age document devoting about nine percent of its content to each of these topics. “Public Health” is the least common, accounting for about four percent of the corpus’ content.

**Comparing Coverage across Region**

Coverage of these topics is unevenly distributed across region; that is, certain topics are more prevalent in stories about certain places. To get a better sense of this, STM allows one to plot the relationship between topical prevalence and metadata in a regression-like framework. Specifically, the model estimates the expected proportion of an unseen document devoted to a topic as a function of the region the article is about and the year it was published. Holding time constant, a number of topics vary significantly in their expected proportions depending on the region covered. Figure 4 visualizes these findings for a number of topics.

Figure 4: Expected Document Proportions for Four Topics
As the graphs show, if we came across an unseen article reporting about a MENA country, we would expect approximately 11 percent of its content to be devoted to “Women’s Rights & Gender Equality,” with a confidence interval of a little over 1 percent. But if that article was about a Western country – even if it was published in the same year – we would expect less than 8 percent of its content devoted to “Women’s Rights & Gender Equality,” In other words, reporting about women in MENA countries devotes 73% more coverage to “Women’s Rights & Gender Equality,” compared to women in the West, and more than four times the attention to “Religion.”

The reader may find these results unsurprising, given the varying situation of women’s rights around the world. In other words, U.S. coverage about women’s rights may focus more on MENA and Muslim-majority countries because those are the societies that are least hospitable to women. And, as we’ve seen above, the press tends to focus on Muslim and MENA countries with the worst records of gender discrimination. Hypothesis 2 of the gendered orientalist argument, however, argues there is a bias, even when account for realities on the ground.

**Modeling Hypothesis 2**

The dependent variable in Hypothesis 2 is the percentage of coverage devoted to women’s rights for a particular country-year (*Rights Focus*). We expect this percentage to be higher for Muslim and MENA countries, even when controlling for *Women’s Rights Index*. I operationalized the outcome variable by taking the average proportion of articles assigned to the topic “Women’s Rights & Gender Equality,” weighted by number of words in each article. In other words, I sum the number of words addressing “Women’s Rights & Gender Equality” and divide it by the total number of words for all articles in that country-year. This gives an estimate of the degree to which these news-
papers focused on this topic relative to others for each observation, ranging from 0 to 1.

The dependent variable Rights Focus is then regressed onto two main explanatory variables. The first is Women’s Rights Index, measuring respect for women’s political, social, and economic rights, using the same CIRI indicators described above. Theoretically, Women’s Rights Index should be negatively correlated with Rights Focus. The reasoning is that coverage of “Women’s Rights & Gender Equality” tends to be negative in tone, addressing the violation of women’s rights and the absence of gender equality. Thus we would expect to see more language pertaining to “Women’s Rights & Gender Equality” in articles written about rights-violating societies.

The second explanatory variable is whether the observation represents a Muslim or Middle Eastern country. Again I use the same variables described in the previous analysis: the fractional Percentage Muslim ranging from 0 to 1, the dichotomous Muslim Majority, and the dichotomous MENA variables. We would expect to see higher Rights Focus for Muslim and MENA countries, as predicted by the Reduction hypothesis.

I also include two controls that may affect the amount of rights language in reporting. First, coverage of women’s rights may be driven by the general state of human rights protections in certain countries. For instance, the poorer a country’s rights protections, the more coverage it may receive on its rights situation in general, including women’s rights. For this reason, I include a measure of general human rights protections, the Physical Integrity Rights index, also from the CIRI dataset. I also include a Democracy variable, described above.

Because country-years had to contain at least one article to be included in the sample (n = 1451), I use a two-step heckman model to account for potential selection ef-

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19 See Supporting Information for details on this measure.
fects. The selection equation is identical to the model presented in Table 1, where the dependent variable is the *Reported (Binary)*, indicating whether a country-year contained any articles in the data set. Conditional on inclusion, an OLS model was estimated regressing *Rights Focus* on the four explanatory variables. As with the previous models, I lag time-variant explanatory variables by one year and use Huber-White corrected robust standard errors clustered on country. The results are summarized in Table 4.

As expected, *Women’s Rights Index* is statistically significant and negative in all models, indicating that U.S. news media highlight the issue of “Women’s Rights & Gender Equality” when covering those societies with poor respect for women’s rights. However, even when we control for *Women’s Rights Index*, we find that the coefficients on the *Muslim Majority*, *MENA* and *Muslim Percentage* variables are statistically significant and positive. In other words, U.S. news media talk more about “Women’s Rights & Gender Equality” if the reported country is in the MENA region or has a larger Muslim population, regardless of the status of women’s rights on the ground.

This finding supports Hypothesis 2, which states that women from Muslim and/or MENA countries are represented narrowly in U.S. news media, characterized largely by their subordination, whereas women from other societies are portrayed in greater complexity. First, there is an intergroup bias insofar as the issue of gender discrimination is more prevalent in stories about Muslim societies than non-Muslim societies. Second, there is an interreality bias in the sense that this disparity remains, even after controlling for the reality of women’s rights in the reported country. As an illustration, Figure 5 presents a sample of headlines about women’s sports in the Muslim world; notice the observable framing around the issue of “Women’s Rights & Gender Equality.”
Table 4: Two-Step Analysis of Rights Focus in U.S. News Coverage of Women Abroad

<table>
<thead>
<tr>
<th>Rights Focus</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.094***</td>
<td>0.093***</td>
<td>0.089***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>Women’s Rights Index</td>
<td>-0.014**</td>
<td>-0.015**</td>
<td>-0.013**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Muslim Majority</td>
<td>0.036***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENA</td>
<td></td>
<td>0.051***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.008)</td>
<td></td>
</tr>
<tr>
<td>Muslim Percentage</td>
<td></td>
<td></td>
<td>0.042***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.008)</td>
</tr>
<tr>
<td>Democracy</td>
<td>-0.0004</td>
<td>0.0002</td>
<td>-0.0004</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0004)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>Physical Integrity Rights</td>
<td>0.005***</td>
<td>0.004***</td>
<td>0.005***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>IMR1</td>
<td>-0.016**</td>
<td>-0.012**</td>
<td>-0.016**</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>N</td>
<td>1039</td>
<td>1040</td>
<td>1039</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.580</td>
<td>0.585</td>
<td>0.581</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.578</td>
<td>0.582</td>
<td>0.579</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.076 (df = 1033)</td>
<td>0.075 (df = 1034)</td>
<td>0.076 (df = 1033)</td>
</tr>
<tr>
<td>F Statistic</td>
<td>238.113*** (df = 6; 1033)</td>
<td>242.629*** (df = 6; 1034)</td>
<td>238.835*** (df = 6; 1033)</td>
</tr>
</tbody>
</table>

**p < .001; ***p < .01; *p < .05
Robust standard errors clustered on country appear in parentheses.
Figure 5: Sample of Headlines about Muslim Women’s Sports

“On Horseback, Breaking Barriers”
“A Quiet Revolution In Iran; Beneath Coat And Scarf, Women Discover The Freedom To Play”
“For A Women’s Soccer Team, Competing Is A Victory”
“Saudi End To Olympics Women Ban Will Have No Practical Effect”
“A Giant Leap For Women, But Hurdles Remain”
“For Women At Track Meet In Qatar, It’s A Coverup”

Note: Sample is non-random and for illustrative purposes.

While the magnitude of the Rights Focus coefficients may appear small (ranging from 3.4 to 3.6 percent), note that they indicate changes in topical focus relative to all content. In other words, if the average article about a non-Muslim observation devoted 10 percent of its content to the topic of “Women’s Rights & Gender Equality,” we would expect the topic prevalence to increase to 13.5 per cent for a Muslim observation. Further, the mean of Rights Focus across all observations is only about 8.7 percent; a 3.4 to 3.6 percent shift around a base of 8.7 is substantial. In sum, the American news media tend to frame stories about Muslim women around the topic of “Women’s Rights & Gender Equality”, significantly more so than non-Muslim women.

As in the previous analysis, results are robust to a range of alternative specifications. First, I added a one-year lagged dependent variable as a regressor in the model to account for the possibility of serial correlation, i.e., journalists maintain their thematic focus for a particular country from year to year. Second, I replaced the composite Women’s Rights Index variable with the three individual indicators representing Women’s Po-
litical Rights, Women’s Social Rights, and Women’s Economic Rights. Third, I estimate models using an alternative measure of the dependent variable Rights Focus. Instead of relying on topic modeling, this alternative measure uses a simple word search strategy to apply boolean labels to documents: If a document contained the word “right” (including the plural “rights,” “equal,” “sexist,” or “sexism,” it was labeled as pertaining to women’s rights. Then for each country-year observation, I summed all documents containing the women’s rights label, and divided this count by the total number of articles for that observation. This offers a similar fractional variable to the Women’s Rights Focus variable used in the main analyses. Finally, I estimated one-step models using fractional logit. In all models, the results were substantially identical.20

Coverage of Sexual Assault

The topic concerning “Sexual Assault” deserves further mention. Scholars of gendered orientalism claim that U.S. media is obsessed not only with gender equality but also violence against women in the Muslim world. The topic of “Sexual Assault,” however, displayed relatively low prevalence in articles about women in the MENA region compared to those in Latin America, Asia, Eastern Europe / Central Asia and Africa. This suggests evidence against an intergroup bias whereby “Sexual Assault” is associated exclusively with Muslim women. Unfortunately a test for interreality bias, like the one above for “Women’s Rights & Gender Equality,” is impossible due to lack of reliable data on sexual assault, rape, or violence against women at the country-year level.

We can, however, glean some qualitative insights through an examination of the

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20 Reports of all alternative models are included in the Supporting Information.
documents themselves. While inspecting articles with a high prevalence of the topic “Sexual Assault” for each region, it becomes clear that this topic encompasses a broad range of specific issues, ranging from rape to war crimes and police/criminal justice more generally. For instance, representative articles about sexual assault in the EECA region center primarily around two modal issues: wartime rapes during the Balkan conflicts, especially Bosnia; and the trial and imprisonment of the Russian feminist punk rock band Pussy Riot. Relevant coverage in Latin America focuses on smuggling and trafficking, the drug war, and murders of hundreds of women in and around the northern Mexican city of Ciudad Juarez. Coverage on sexual assault in Africa focuses heavily on female genital mutilation and war crimes in Rwanda and the Congo.

Interestingly, more than 40 percent of all coverage about “Sexual Assault” stem from Asia.21 A substantial portion of this coverage concerns the Delhi gang rape case that occurred in December 2012. In fact, 30 percent of all articles about Asia in the whole sample were published between 2012 and 2014, and the majority of these concerned India. By all accounts, the interest that this particular story attracted was unprecedented. As for the MENA region, representative articles feature content that is highly associated with culture and religion, including stories on stoning in the Sudan, “moral crimes” in Afghanistan, a Sudanese woman facing fines for wearing trousers, and virginity tests of Egyptian protesters. This observation should not come as a surprise, given the disproportionate focus paid to religion in general in the MENA region (see Figure 4.)

In sum, unlike coverage of “Women’s Rights & Gender Equality,” coverage of “Sexual Assault” tends to be much more evenly distributed among Muslim and non-Muslim societies. On the other hand, coverage of “Sexual Assault” focus overwhelm-

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21 See Supporting Information for more details on this statistic.
ingly on non-Western countries, while displaying the lowest prevalence in stories about Western women. In addition, coverage of “Sexual Assault” emanating from the MENA region tends to focus on stories with a significant cultural and religious component. While the results are inconclusive, it is plausible that readers may come away with the impression that sexual assault is a strictly non-Western problem, along with the implication that the influx of Muslim (or non-Western) immigrants may introduce cultural or religious practices that endanger the safety of women in the West.

9/11 and Change over Time

Finally, how does 9/11 figure into these results? The literature of gendered orientalism is inconclusive regarding the role of 9/11 and recent historical events. On the one hand, scholars insist on the long history of orientalism, and have been discussing the gendered aspects of this discourse decades before 9/11. On the other hand, many scholars describe 9/11 as a pinnacle moment, ushering a new age of anti-Muslim sentiment, especially in the United States. The literature on gendered orientalism has been particularly robust in the last decade.

With these data, some trends appear roughly stable across time, i.e. before and after 9/11. For instance, while the MENA region was the most covered region in the sample from 2002 to 2005, that increase goes away once we normalize for the amount of *New York Times* coverage devoted to MENA countries in general. Likewise, the effects described in the Reduction Hypothesis (H2) appear stable in pre- and post-9/11 samples.\(^{22}\)

On the other hand, initial analysis suggests that the Confirmation Bias hypothesis (H1) may have *lessened* in the post-911 era. In some models, the coefficients of interest

\(^{22}\) See Supporting Information for tables.
lose significance when run on a post-9/11 subsample. Given the number of modeling assumptions involved in this analysis, this cannot be taken as definitive evidence that U.S. media are becoming more even-handed in their reporting of women abroad. It may, however, give plausibility to that claim, undermining the conventional wisdom that gendered orientalism has worsened after the events of 9/11. Still, future research is necessary for determining how 9/11 and the subsequent War on Terror has affected concerns surrounding cultural distinctions between Muslims and the West.

**Conclusions and Future Research**

No society is immune from gender discrimination. But this paper demonstrates that representations of women – and their rights – are unevenly portrayed in U.S. news reporting. First, I put forth a confirmation bias hypothesis, whereby Muslim women are considered newsworthy to the extent that they live in societies that violate their rights. Not only is there a bias in terms of quantity of coverage, but in the substance and framing as well. In the reduction hypothesis, women from Muslim and MENA societies are more likely to have their social experience reduced to one facet – “Women’s Rights and Gender Equality” – in contrast to non-Muslim women, who are represented in greater complexity.

While this kind of content analysis cannot definitively demonstrate the effects of media coverage on public attitudes, it does provide plausibility to the claim that readers are exposed to a particularly pernicious stereotype of Muslims: they are distinctly sexist. This has three major implications. First, given that the American public tends not to differentiate between Muslims at home and abroad, the disproportionate emphasis on women’s inequality in Muslim lands may shape negative attitudes towards Muslim-Americans by painting them as a cultural “other.” The association of Muslims as a cultural threat may also influence policy debates, such as the recent crisis concerning Syri-
an refugees. Scholars have shown that stories about crime shape public opinion of African Americans (Dixon and Linz 2000; Entman 1992; Gilliam Jr and Iyengar 2000; Hurwitz and Peffley 1997; Peffley, Shields, and Williams 1996) and social welfare policies (Gilens 1996a; Gilens 1996b; Kellstedt 2000; Valentino, Hutchings, and White 2002).

In a similar vein, stories about gender inequality may shape public opinion towards the War on Terror or potential settlement of Muslim asylum seekers.

Second, the United States has a limited attention span when it comes to global women’s rights. While women from Muslim and Middle Eastern countries are front and centered on the agenda, oppression in other societies is ignored. Insofar as media attention drives awareness and resources, women from non-Muslim countries in Africa, Asia, Latin America and Europe lose out in this scenario, even if they suffer more egregiously. Likewise, the dichotomy between the “oppressed Muslim women” and the “liberated Western woman” – a central trope in gendered orientalism – minimizes the extent to which women in the West (including the United States) continue to struggle with discrimination and inequality.

Lastly, an obsession with Muslim women’s rights may, ironically, have counterproductive consequences for the goal of gender equality within Muslim communities. Considering the already volatile environment surrounding Islam in the American public sphere, a disproportionate focus on Muslim women’s oppression is likely to be met with suspicion and incredulity among Muslim men and women alike. This is especially likely when the media’s diagnoses of sexism in Muslim societies point overwhelmingly to Islam. Tired of feeling singled out, Muslims both at home and abroad may learn to equate feminist criticism with imperialism and Islamophobia, thus undermining even local initiatives for gender equality (Terman 2016).

Yet, a number of questions remain. First, due to the limited sample, we do not
know to what degree these biases vary across platform. Some scholars of gendered orient- 
entalism argue that conservative and right-wing factions are the worst offenders, 
whereas other insist the stereotypes surrounding Muslim women are ubiquitous amongst even progressive crowds (Kumar 2012). Using similar techniques to the ones 
presented here, future research could examine these trends in liberal vs. conservative 
media. Likewise, scholars could compare coverage in news outlets vs. entertainment, 
social media platforms, as well as media outside the United States.

Second, the precise mechanisms driving these trends – i.e. confirmation bias and 
reduction – remain unclear. What makes journalists write about women, or about Mus- 
lim societies, the way they do? Recent research has emphasized the role of civil society 
organizations in shaping media coverage about Muslims. Chris Bail, for instance, shows 
that anti-Muslim organizations originally occupied discursive niches but were ampli- 
fied by mass media on account of their emotional energy, eventually drifting from the 
fringe of the discursive field into the mainstream (2012). Scholars interested in the posi- 
tivist aspects of gendered orientalism could make similar inquiries into the ecological 
and organizational dynamics of media attention of women abroad, as well as explore 
temporal dynamics in greater depth.

Finally, this study is limited with regards to media effects. While a number of 
experimental studies have demonstrated the influence of the “Muslims as terrorists” 
stereotype on attitudes, future research could examine the “Muslims as cultural threat” 
stereotype using congruent designs. Scholars could potentially examine the relationship 
between these two stereotypes, delineating which has a greater impact on public opin- 
ion. Extending beyond gender relations, other stereotypes regarding “Muslim culture,” 
such as respect for religious minorities, could yield similar patterns. Such extensions 
would further this study’s contribution towards a more theoretically refined and empir-
ically robust portrait of Muslim portrayals in the media, and their effects on public opinion.

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