

Bias in the Eye of the Beholder: Cable News Hosts' Facial Sex-Typicality and Political Bias

Abstract

2 | BIAS IN THE EYE OF THE BEHOLDER

Recent studies have suggested that individuals' facial structures may be correlated with their political views. My study examined whether a correlation could be observed between a cable news host's facial sex-typicality and his or her political bias. I observed that, on average, male hosts were more facially sex-typical than female hosts. Additionally, I found that conservative-biased female hosts tend to be more facially sex-typical than liberal-biased female hosts. Among male hosts, I found that conservative-biased hosts tend to be the most facially sex-atypical, while objective hosts tend to be the most facially sex-typical. This study has important implications regarding public perception of media bias and gender stereotypes in the profession of journalism.

Introduction:

Are first impressions accurate? Can an attribute as meaningful as an individual's political affiliation be ascertained at first glance? According to recent studies, the answer may be "yes." A 2010 study found that participants could correctly identify the party affiliations not only of U.S. Senate candidates, but also of college students, simply by viewing photographs of the individuals' faces (Rule & Ambady, 2010, p. 2-3). A 2012 study suggested that such inferences may be based on "facial sex-typicality," the femininity of females' appearances and masculinity of males' appearances (Carpinella & Johnson, 2012). According to the study, Republican women are more facially sex-typical than Democratic women, while Republican men are less sex-typical than Democratic men (id, p. 2). The study also found that, in both political parties, female members of Congress are facially more sex-typical than male members of Congress (id, p. 4). The study observed that the disparity in facial sex-typicality between men and women is more significant among Republicans than among Democrats (ibid).

The media have been called the "fourth branch" of government due to the critical role they play in informing the public and setting the national political agenda (Rivers, 1982, p. 389-390). Although historical norms expected professional journalists to be objective, today, opinion-based cable news programs are popular (Olmstead et al., 2013). This study examines whether the correlation between facial sex-typicality and political views can be extended to the media.

Outline:

My study explored the correlation between the facial sex-typicality and political biases of cable news hosts. Photographs of all of the regular hosts (as of February of 2015) on the three major cable news networks (CNN, Fox and MSNBC) were analyzed for facial sex-typicality. I assumed that CNN hosts tend to be objective, Fox hosts tend to be conservative-biased and MSNBC hosts tend to be liberal-biased. A 2010 content analysis study confirmed the presumed political biases of these networks (Holtzman et al., 2010, p. 198). However, I also manually coded the political biases of the most sex-typical and sex-atypical male and female hosts. I analyzed the average biases of the sources cited on each show in order to measure each host's bias.

Based on the findings of previous research, I hypothesized that female cable news hosts would be more facially sex-typical than male cable news hosts. I expected that this disparity would be greater among conservative-biased hosts than among liberal-biased hosts. I further hypothesized that, among female hosts, Fox hosts would be the most facially sex-typical, while MSNBC hosts would be the most facially sex-atypical. Conversely, among male hosts, I expected that MSNBC hosts would be the most facially sex-typical and that Fox hosts would be the most facially sex-atypical.

Methods:

I obtained the schedules of the three major cable news networks (CNN, Fox and MSNBC) from the networks' websites. Photographs of the hosts of each show were collected online and analyzed for facial sex-typicality using the software Facegen. The software uses objective facial indicators associated with gender, such as "the shape of the jaw, the location of eyebrows, the

placement of cheek bones, the shape of eyes and the contour of the forehead,” to measure sex-typicality (Bennett-Smith, 2012). Facegen coded the facial sex-typicality of each host on a scale from most sex-atypical (-40) to most sex-typical (40). I sorted the hosts by network affiliation and gender.

However, generalizations of political bias based on network affiliation are not applicable to every host. Therefore, I manually coded the political biases of the most facially sex-typical and sex-atypical male and female hosts. Analysis of the political biases of a show’s sources has been established as a measure of a news program’s bias (Groseclose & Milyo, 2005). I observed each host’s show for a maximum of one episode or a minimum of one hour. I identified all of the sources cited. Sources were defined as invited guests, speakers in video clips and authors of statements featured on screen. Multiple clips or statements from the same source were counted only once.

Liberal sources were coded (-1), neutral sources were coded (0) and conservative sources were coded 1. I relied upon a “common knowledge” standard to identify the political affiliations of the sources. For example, a statement from Democratic Senator Harry Reid or a Brookings Institute spokesperson would be coded (-1), while an interview with Republican strategist Karl Rove or talk radio host Rush Limbaugh would be coded 1. Commentators from objective news organizations (e.g. the Associated Press) and guests without identifiable political affiliations were coded as neutral (0). Appointed executive-branch officials were also coded as neutral unless their partisan identities were inseparable from their public identities (e.g. Secretary of State and former presidential candidate John Kerry).

While my methods may actually underestimate bias, they should provide a reliable measure of the relative biases of the cable news hosts. I estimated the overall bias of each host

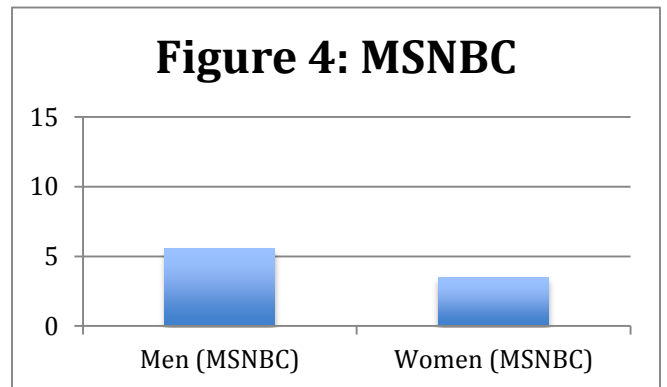
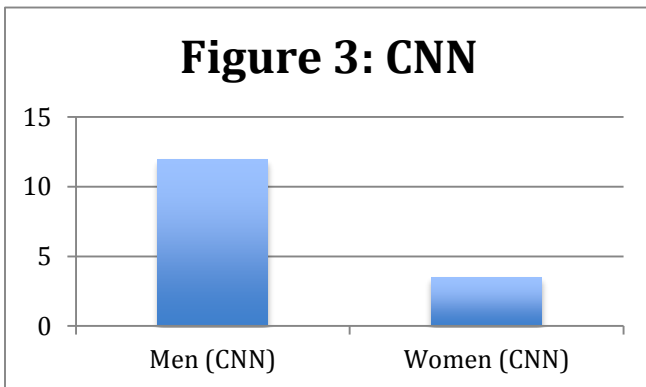
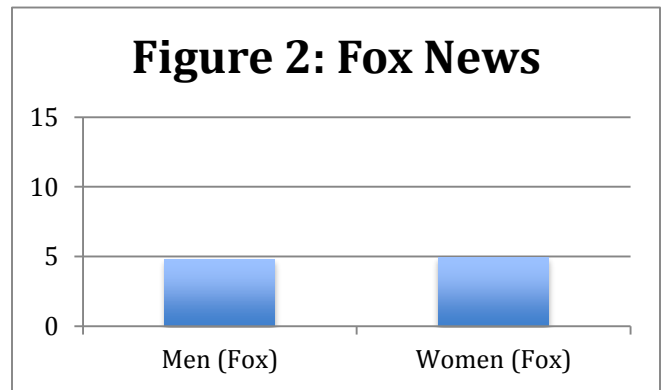
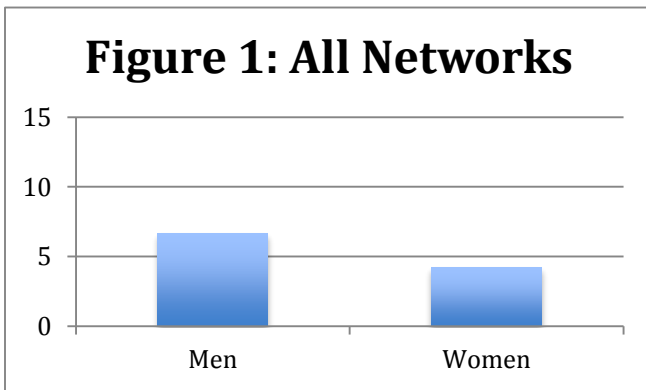
by calculating the average bias of the sources that appeared on his or her show. I added the values coded to all of the sources and divided the sum by the number of sources cited during the show. Therefore, the biases ranged from absolutely liberal (-1) to absolutely conservative (1), with (0) representing absolute objectivity.

Findings:

Sex-Typicality Averages

Table 1: Facial Sex-Typicality Averages

	Fox	CNN	MSNBC	All
Women	4.95	3.50	3.50	4.19
Men	4.81	11.92	5.57	6.65
Both	4.87	8.09	4.62	5.55



Fig

res 1-7 show the average sex-typicality of male and female hosts on all three networks. Contrary to my hypothesis, male cable news hosts were more sex-typical than female hosts, overall.

Facegen assigned male hosts an average sex-typicality rating of 6.65 and female hosts an average rating of 4.19. Hosts of both genders were generally facially sex-typical, receiving average sex-typicality ratings greater than (0). In no category were the hosts' average sex-typicality ratings negative, indicating sex-atypicality. For the most part, average sex-typicality ratings did not deviate significantly from the baseline score of (0), even on a scale of (-40) to 40.

However, a clear outlier in the data is the unusually high average sex-typicality rating of the male CNN hosts, 11.92. This rating is greater than double the average sex-typicality rating of the hosts in any other category. Consequently, the disparity between the facial sex-typicality of male and female hosts was greatest among CNN hosts. Notably, only on Fox were female hosts more facially sex-typical than male hosts. On average, male Fox hosts received a rating of 4.81, while female Fox hosts received a slightly higher sex typicality rating of 4.95.

Figure 5: Male Hosts

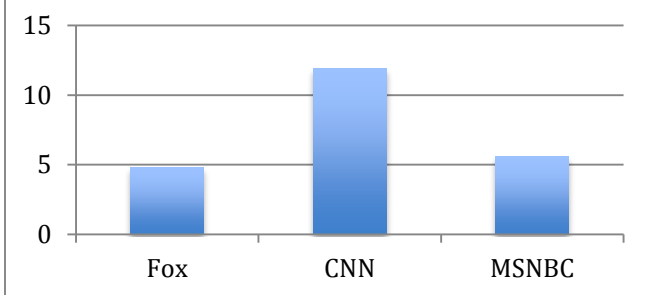
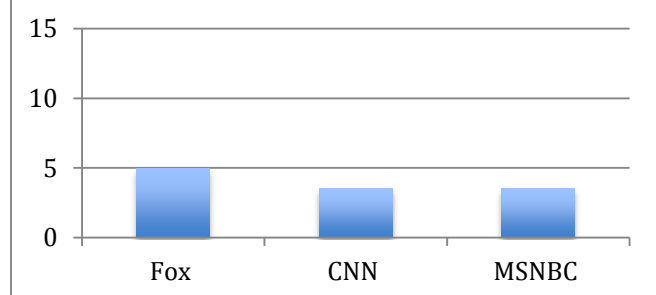
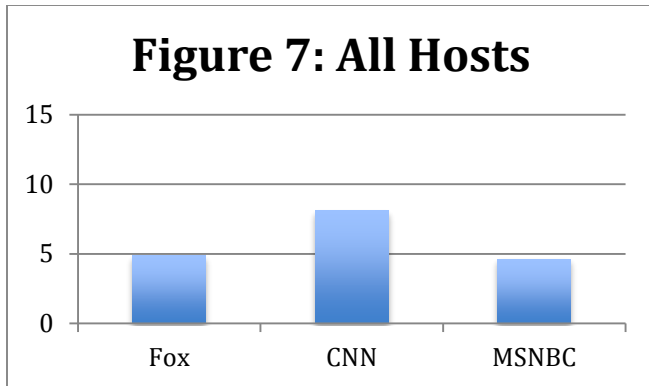


Figure 6: Female Hosts



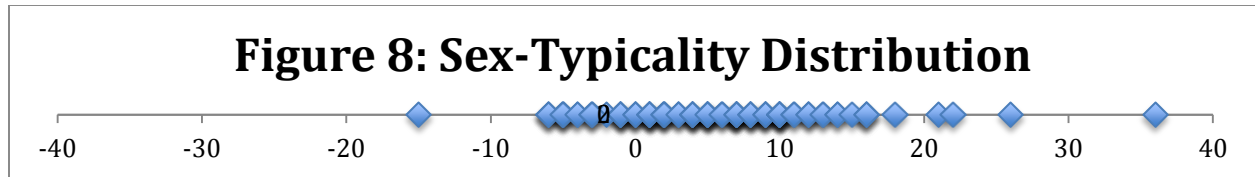


Consistent with my hypothesis, the female hosts on Fox were, on average, more sex-typical than the female hosts on CNN and MSNBC. Female Fox hosts received an average sex-typicality rating of 4.95. Although I predicted that the most sex-atypical female hosts would be affiliated with MSNBC, female CNN and MSNBC hosts received the same average rating, 3.5. Consistent with my hypothesis, among male hosts, the Fox hosts received the lowest average sex-typicality rating, 4.81. Contrary to my hypothesis, however, the most sex-typical male hosts were affiliated with CNN, not MSNBC. As previously stated, male CNN hosts received an unusually high average sex-typicality score of 11.92. Due to the high sex-typicality of the male hosts, CNN hosts received the highest average sex-typicality rating, 8.09, when data for both genders were combined. Considering both men and women, Fox hosts received an average sex-typicality rating of 4.87, slightly higher than MSNBC hosts' average rating of 4.62.

Sex-Typicality Outliers

Table 2: Facial Sex-Typicality Extreme Values

	Fox	CNN	MSNBC	All
Sex-Typical Women	36	12	13	36
Sex-Atypical Women	-5	-5	-6	-6
Sex-Typical Men	10	26	21	26
Sex-Atypical Men	-15	-1	-5	-15



The extreme values in each category (Table 2) were generally consistent with the averages discussed above. As expected, the most facially sex-typical female host was affiliated with Fox. The female Fox host received the highest sex-typicality rating overall, 36. The two most sex-atypical females hosts were affiliated with MSNBC, both rated (-6) by Facegen. The most sex-atypical male host, rated (-15), was affiliated with Fox. The most sex-typical male host, affiliated with CNN, was rated 26. Overall, the sex typicality ratings deviated little from the baseline (0) and contained few outliers, as the distribution in Figure 8 shows.

Affirming Bias

Table 3: Political Bias

	Gender	Network	Bias	Sex-typicality rating
Andrea Mitchell	Female	MSNBC	-0.31	-6
Betty Nguyen	Female	MSNBC	0.00	-6
Eric Shawn	Male	Fox	0.04	-6
John King	Male	CNN	0.25	26
Martha MacCallum	Female	Fox	0.29	36

In order to confirm the political biases assumed based on network affiliation, I manually coded the political biases of the most facially sex-typical and sex-atypical male and female hosts. The hosts' biases were coded on a scale of absolutely liberal (-1) to absolutely conservative (1), in the manner previously described under "Methods." The hosts, as well as their network affiliations, sex-typicality ratings and bias ratings, can be seen in Table 3. Because two female MSNBC

hosts tied for the most sex-atypical rating, Andrea Mitchell and Betty Nguyen, both were coded. The most facially sex-atypical male host, Kelly Wright, is one of five rotating co-hosts on the weekend edition of Fox's "America's News Headquarters." He never hosted during this study. Instead, I coded one of his co-hosts, the second most sex-atypical male host, Eric Shawn. It should be noted that the results of this portion of my study are not verifiably accurate because I was the only coder to analyze the data.

As expected, the MSNBC hosts were coded as most liberal, receiving scores of (-0.31) and (0). However, the CNN host was coded in between the two Fox hosts in terms of bias. CNN's John King received a bias score of 0.25, while the Fox hosts received scores of 0.04 and 0.29. Overall, the results were skewed towards a conservative bias, with an MSNBC host receiving a neutral rating. I suggest two possible explanations of this trend. First, Republicans currently control both the House of Representatives and the Senate. Thus, when Congressional leaders are cited, Republicans are cited. Secondly, this content analysis took place within a year of the 2016 presidential primaries. Because the Democratic primary does not appear to be highly contested, the media have focused their coverage on potential Republican candidates. These two phenomena may have caused a disproportionate number of sources cited on all cable networks to be Republicans. I nonetheless maintain that the presumed biases of CNN, Fox and MSNBC are generally accurate.

Discussion:

Although I hypothesized that female cable news hosts would be more facially sex-typical than male cable news hosts, my research indicated an opposite trend. On average, male hosts were

more sex-typical than female hosts. I offer two possible explanations of this outcome. Perhaps journalism is socially considered a masculine profession. In many fields, professional women face a tradeoff between appearing feminine and being perceived as competent (Hall Jamieson, 1995, p. 16). Presumably, the most desired trait in a journalist, whether male or female, is competence. This social norm may explain why, generally, female hosts are less feminine than male hosts are masculine. Perhaps journalism is even considered a more masculine profession than politics, explaining why the opposite trend was observed among politicians (Carpinella & Johnson, 2012, p. 2). However, it is also possible that, because more journalists identify as Democrats than as Republicans (Willnat & Weaver, 2014, p. 11), more masculine and less feminine facial structures reveal some journalists' underlying political opinions. This trend may occur even if the journalists' opinions are not reflected in their reporting.

The facial sex-typicality of cable news hosts sometimes, but not always, aligned with the gender stereotypes of their respective political ideologies. Consistent with my hypothesis, I found that female Fox hosts were the most facially sex-typical female hosts, on average. As conservative-biased hosts appealing to a conservative audience, the female Fox hosts may be fulfilling the traditional gender stereotypes associated with conservative values. Carpinella and Johnson (2012) reached a similar conclusion in explaining the femininity of female Republican politicians. Also consistent with my hypothesis, I found that male Fox hosts were the most sex-atypical male hosts. Carpinella and Johnson (2012) suggested that male Republican politicians appeared less masculine because their positions in government already conferred the image of masculinity expected by traditional gender stereotypes. If journalism is a masculine profession, the same trend might explain the facial sex-atypicality of male Fox hosts. However, I did not find such a consistent trend among the hosts on other networks, implying that facial structures

may be most indicative of political bias among conservatives. Contrary to my hypothesis, while I found that female CNN and MSNBC hosts were more facially sex-atypical than female Fox hosts, I found no statistical difference between the average sex-typicality ratings of the female MSNBC and CNN hosts. It is worth noting, however, that the two most sex-atypical hosts were affiliated with MSNBC. Additionally, I found that male CNN hosts were, by far, the most sex-typical male hosts, contrary to my hypothesis. If masculinity is associated with competence in journalism, perhaps CNN, marketed as an objective provider of hard news (Bode, 2014), expects its male hosts' physical appearances to reinforce this image.

If facial structure is an accurate reflection of political bias, it could allow viewers to, even subconsciously, recognize biased journalists. Such a phenomenon could have positive implications for democracy. However, when facial sex-typicality does not accurately reflect political bias, underlying assumptions could cause viewers to infer bias when no bias exists. Perhaps allegations of media bias made by conservatives (Pew Research Center, 2009) are partially based on the viewers' gender stereotypes and the facial structures of mainstream news hosts. The relationship between political opinions and facial sex-typicality, and the impact of this relationship upon society, merits further exploration.

Appendix 1: Code Book

Facial Sex-Typicality:

-40= Sex-atypical

40= Sex-typical

Political Bias:

-1 = Liberal

0 = Neutral

1 = Conservative

References

Bennett-Smith, M. (2012). Republican Women: Female GOP Politicians Look More Feminine,

Congressional Physiognomy Study Suggests. *The Huffington Post*. Retrieved from:

http://www.huffingtonpost.com/2012/09/29/republican-women-feminine-gop-female_n_1924389.html

Bode, M. (2014). Organized to Polarize. *Harvard Political Review*. Retrieved from:

<http://harvardpolitics.com/covers/organized-polarize-cnn-fox-news-msnbc-roots-partisan-cable-television/>

Carpinella, C. M. & Johnson, K. L. (2012). Appearance-based politics: Sex-typed facial cues communicate political party affiliation. *Journal of Experimental Social Psychology*.

Retrieved from: http://themonkeycage.org/wp-content/uploads/2012/09/Appearance_Politics.pdf

Groseclose, T. & Milyo, J. (2005). A Measure of Media Bias. *The Quarterly Journal of Economics*. Retrieved from:

<http://www.sscnet.ucla.edu/polisci/faculty/groseclose/pdfs/MediaBias.pdf>

Hall Jamieson, K. (1995). Beyond the Double Bind: Women and Leadership. Retrieved from:

<http://books.google.com/books?id=67DB9krBq2oC&printsec=frontcover#v=onepage&q&f=false>

- Holtzman, N. S., Schott, J. P., Jones M. N., Balota D. A., & Yarkoni T. (2010). Exploring media bias with semantic analysis tools: validation of the Contrast Analysis of Semantic Similarity (CASS). *Behav Res (2011) 43:193–200*. Retrieved from: http://download.springer.com/static/pdf/453/art%253A10.3758%252Fs13428-010-0026-z.pdf?auth66=1424137229_db1214ef525caf2862d4baee1b6ddc63&ext=.pdf
- Olmstead, K., Jurkowitz, M, Mitchell, A., & Enda, J. (2013). How Americans Get TV News at Home. *Pew Research Center*. Retrieved from: <http://www.journalism.org/2013/10/11/how-americans-get-tv-news-at-home/>
- Pew Research Center (2009). Fox News Viewed as Most Ideological Network. Retrieved from <http://www.people-press.org/2009/10/29/fox-news-viewed-as-most-ideological-network/>
- Rivers, W. R. (1982). The Other Government: Power and the Washington Media. Retrieved from: <http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1615&context=mulr>
- Rule, N. O. & Ambady, N. (2010). Democrats and Republicans Can Be Differentiated from Their Faces. *PLoS ONE 5(1): e8733*. doi:10.1371/journal.pone.0008733. Retrieved from: <http://spp.sagepub.com/content/1/3/206.refs>
- Willnat, L. & Weaver, H. (2014). The American Journalist in the digital Age: Key Findings. Retrieved from: <http://news.indiana.edu/releases/iu/2014/05/2013-american-journalist-key-findings.pdf>