

Geographers by Gender

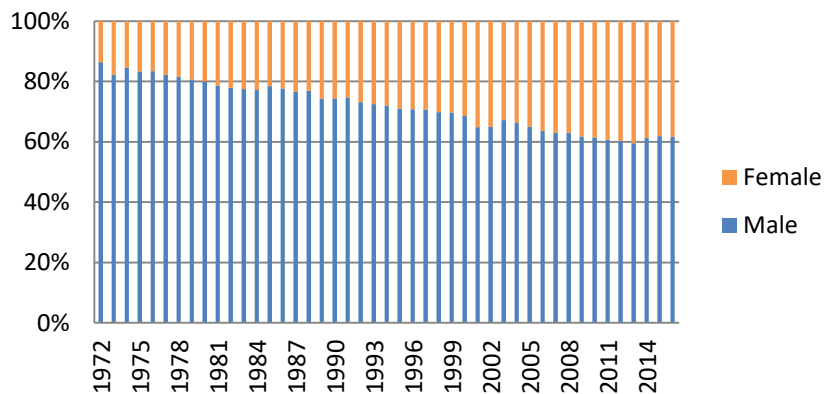
Geography in the United States has traditionally been, and remains, a male-dominated discipline. According to various data sources, currently around two-thirds of geographers are male and one-third are female.

AAG members

The AAG membership can be used as a proxy for geographers as a whole since the members are a diverse group including students and educators, government, private sector and non-profit workers, unemployed and retirees.

- Currently 62% of AAG members are male and 38% are female¹.
- When the Association was established in 1904, just two of the original 48 members were women. The proportion of female members has been very steadily rising since.
- Figure 1 shows comparable membership records dating back to 1972 when 14% of members were female².

Figure 1: Change in gender balance among AAG members, 1972-2016



¹ Source: AAG membership data, 2016; sample size 6,034.

² Source: Annual AAG membership data, 1972 to 2016.

Geography in K-12 education

Teachers

- Of the approximately 18,500 geography teachers in public, county, state, and private schools in the United States, 59% are male and 41% female³.
- Geography shows a much stronger male bias than among teachers of all subjects and grades at public and private schools, where 24% are male and 76% female⁴.
- Among AAG members, the gender balance of K-12 educators has fluctuated over the years. In 1972, 80% were male and 20% female; in 2016 the figures were 56% male, 33% female (although the sample size was too small to be statistically significant) with gender balance around the turn of the century and an overall average across 43 years of 67% male and 33% female⁵.

Students

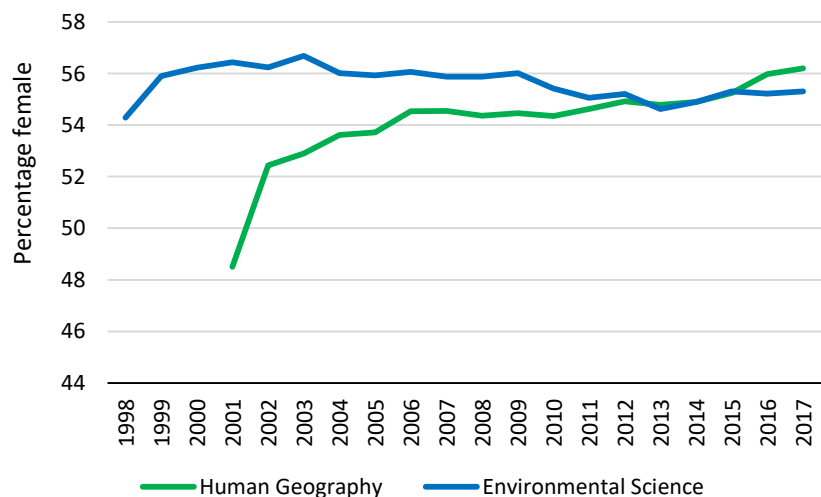
Contrary to trends across the rest of geography, the gender balance at high school level is towards more females taking the subject.

- During the most recent year, 44% of the students taking the Advanced Placement (AP) exam in Human Geography were male and 56% were female⁶. The figures were similar for the AP exam in Environmental Science at 45% male and 55% female⁷.

- Looking across the 38 subjects currently available as AP programs, these two subjects lie around the overall average of all AP students (45% male, 55% female) with the extremes in gender balance being 24% female in Computer Science and 80% female in Studio Art (Drawing)⁸.

- Figure 2 shows that Human Geography has become increasingly female since AP programs started in 2001, while Environmental Science has varied little since starting in 1998⁹.

Figure 2: Percentage of students taking AP exams that are female, 1998-2017



³ Source: Geography and social studies teachers in the US by gender, 2013-14; sample size 18,567. Cited in 'Status of Geography Education in the United States', National Geographic Society 2014.

⁴ Source: NCES number of teachers in public and private elementary and secondary schools, 2011-12; sample size 3,850,058.

⁵ Source: Annual AAG membership data, 1972 to 2016.

⁶ Source: The College Board, AP Program Summary Report 2016; sample size 149,096.

⁷ Source: The College Board, AP Program Summary Report 2016; sample size 184,663.

⁸ Source: The College Board, AP Program Summary Report 2016; sample size 4,704,980.

⁹ Source: The College Board, AP Program Summary Reports 1998-2016.

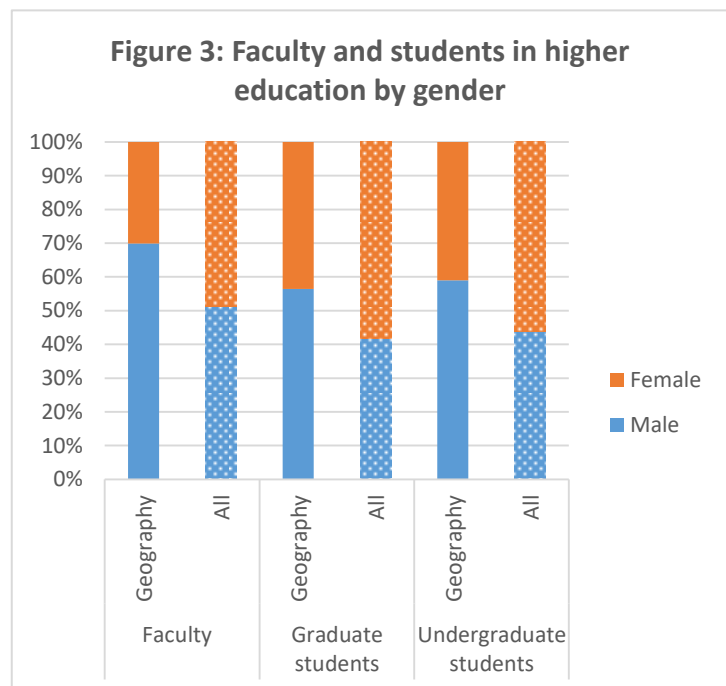
Geography in higher education

Faculty

- Currently 65% of faculty in university and college geography departments are male and 35% are female¹⁰.
- In comparison, instructional faculty in postsecondary institutions across all disciplines are more gender-balanced at 51% male and 49% female¹¹.
- Among AAG members, the proportion of female geographers in higher education has been increasing steadily by about 1% every two years. In 1972, 93% of AAG members who worked working in colleges or universities were male and 7% female, rising to 69% male and 30% female in 2016¹².

Students

- The current gender balances among geography students are 56% male to 44% female among graduate students¹³ and 60% male to 40% female among undergraduate students¹⁴, averaging out at 58% male to 42% female.
- Geography students are considerably more male-dominated than the student population overall where 42% of graduate students¹⁵ and 44% of undergraduate students¹⁶ are male.
- Among AAG members, the proportion of female geography students has been increasing steadily by about 0.66% every year. In 1972, 85% of AAG members who reported their employment status as student were male and 15% female, rising to 48% male and 42% female in 2016¹⁷.



¹⁰ Source: AAG supplemental survey to geography departments, 2016; sample size 837.

¹¹ Source: NCES number of faculty in degree-granting postsecondary institutions, 2015; sample size 1,551,015.

¹² Source: Annual AAG membership data, 1972 to 2016.

¹³ Source: AAG supplemental survey to geography departments, 2016; sample size 1,335. These data are very similar to the NCES figures for degrees conferred in geography by postsecondary institutions 2013-2014 which gives the proportions as 59 male/41 female.

¹⁴ Source: AAG supplemental survey to geography departments, 2016; sample size 4,918. These data are very similar to the NCES figures for degrees conferred in geography by postsecondary institutions 2013-2014 which gives the proportions as 64 male/36 female.

¹⁵ Source: NCES Fall enrollment in degree-granting postsecondary institutions, 2014; sample size 2,914,582.

¹⁶ Source: NCES Fall enrollment in degree-granting postsecondary institutions, 2014; sample size 17,292,787.

¹⁷ Source: Annual AAG membership data, 1972 to 2016.

Geography in the workplace

- Among geographers who are working professionals in sectors other than education, 69% are male and 31% female, although there is quite a range between sectors, as shown in Figure 4; for example, 57% male in the non-profit sector but 74% male in private industry¹⁸.
- Among professional geographers outside of the education sector, the proportion of females has increased over the last few decades in every employment sector apart from the military (see Figure 5).

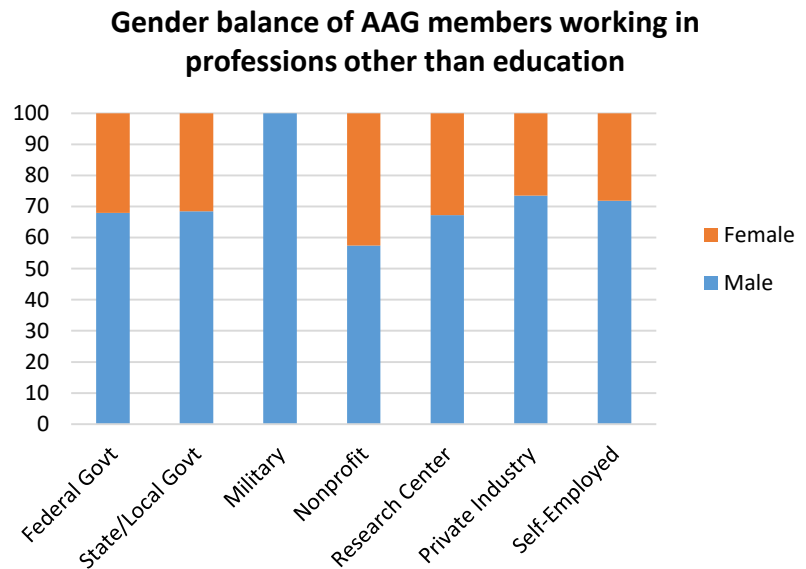
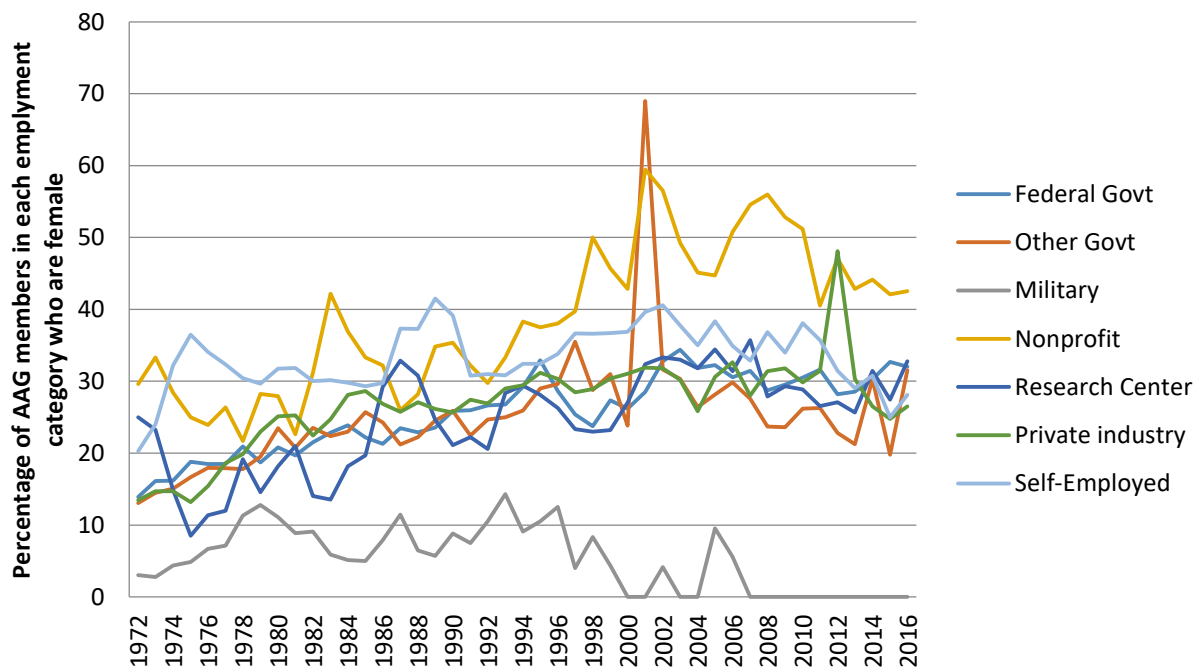


Figure 5: Change in proportion of females in various professional sectors, 1972-2016



¹⁸ Source: AAG membership data, 2016 excluding the employment categories student, K-12 educator, college and university, unemployed, retired; sample size 497.

AAG Staff and Officers

AAG Presidents

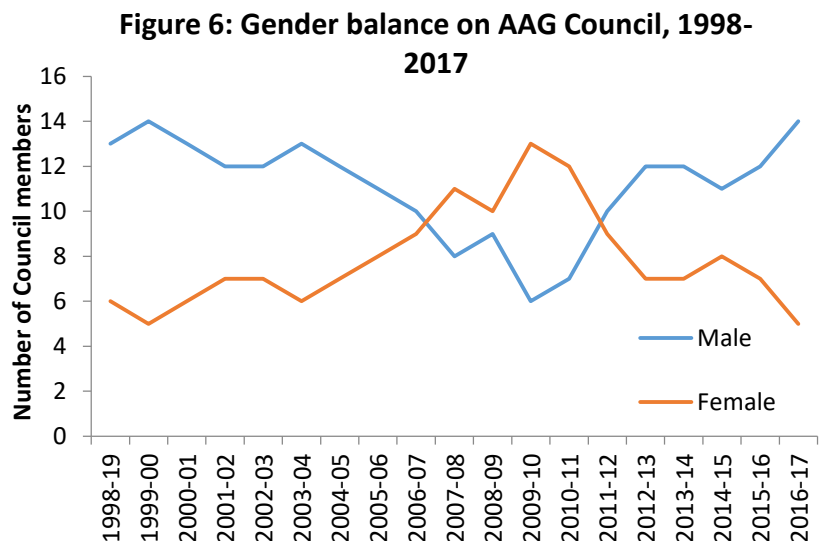
Of the 113 AAG Presidents between 1904 and 2017, 99 were male (87.6%) and 14 female (12.4%)¹⁹. The first female President was Ellen Churchill Semple who served 1921-22. The next female president was not selected until 1984-85. 11 of the 14 women Presidents have served in the last 20 years (1996-2016).

The American Society of Professional Geographers, which was established in 1944 and merged with the AAG in 1948, had five Presidents, all of whom were men²⁰.

Between 1955 and 1966 the AAG appointed an Honorary President in addition to a President, the former had a year to prepare a presidential address and the latter carried out the executive duties of the organization. All 12 people who served annual terms as Honorary President were male²¹.

AAG Council

There are 19 member of the AAG Council²². Over the last two decades, the ratio of men to women has fluctuated year by year with the extremes being 14 men/5 women and 6 men/13 women, as shown in Figure 6²³.



AAG Executive Directors and Staff

In 1963 the AAG established a national office with a full-time Executive Officer²⁴. To date eight different people have held this position, of which just one was a woman, who served from 1979 to 1984²⁵.

In 1963 the central office had two female full-time assistants, and two part-time assistants in addition to the male Executive Officer²⁶. Today there are 6 male and 18 female members of staff²⁷.

¹⁹ Source: AAG Handbook 2016, p314; William Morris Davis served three terms as President but as two were separate in time so he is counted twice.

²⁰ Source: AAG Handbook 2016, p315.

²¹ Source: AAG Handbook 2016, p315.

²² The AAG Council comprises the Officers of the Association (President, Vice President, Secretary, Treasurer), Councilors (6 elected at large plus 1 elected from each regional division), the most recent Past President, and the Executive Director (*ex officio*)

²³ Source: AAG Council minutes and internal documents, 1998-2016.

²⁴ The first 3 office holders had the title of Executive Officer, the next was Executive Secretary, and since then the position has been Executive Director.

²⁵ Source: AAG Handbook 2016, p315.

²⁶ Source: Preston E. James and Geoffrey J. Martin (1978) *The Association of American Geographers: The First Seventy-Five Years, 1904-1979*, p.123.

²⁷ Source: <http://www.aag.org/cs/staff>, correct at 28 Nov 2017.

AAG Journals

Journal Editors, Associate Editors, Editorial Board members

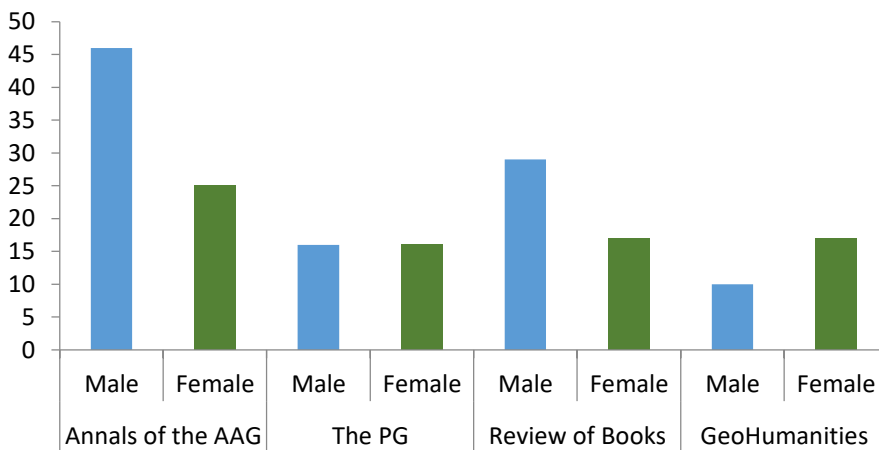
AAG has four scholarly journals: *Annals of the AAG*, *The Professional Geographer*, the *AAG Review of Books*, and *GeoHumanities*.

The gender composition of those currently serving as editors, associate editors and on the editorial boards is shown in Table 1²⁸. Overall, 58% of those serving in different roles are male and 42% female.

Table 1: Gender composition of AAG journals editors and editorial board members, 2016

	Male	Female
Editors	6	2
Associate Editors	3	3
Editorial Board	101	75
Total	110	80

Figure 7: AAG journals editorial board members by gender, 2016



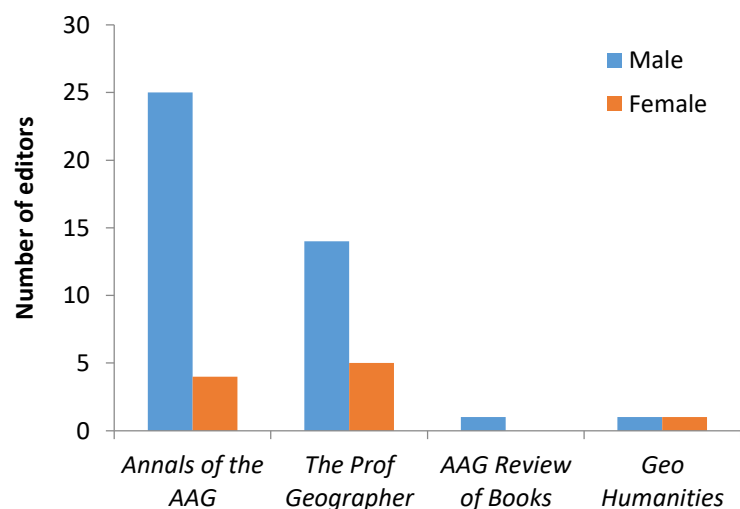
Considering the editorial boards separately, Figure 7 shows some difference ranging from the *Annals of the AAG* board being almost two-thirds male while the *GeoHumanities* board being almost two-third female²⁹.

Of the 49 people who have served as editors of the AAG journals from 1911 to 2016, 39 were male and 10 female. The distribution by journal is shown in Figure 8³⁰.

The first female was Evelyn L. Pruitt who served as editor of *The Professional Geographer* from 1958 to 1959.

It was more than 70 years from the founding of the *Annals of the AAG* that its first female editor was appointed: Susan Hanson who served from 1982 to 1987.

Figure 8: Editors of AAG journals by gender, 1911-2016



²⁸ Source: Names of Editors, Associate Editors and Editorial Board members are on the webpages for each journal <http://www.aag.org/cs/publications/journals>, correct at 17 Nov 2016.

²⁹ Source: *ibid.*

³⁰ Source: AAG Handbook 2016, p316.

Authors of published material

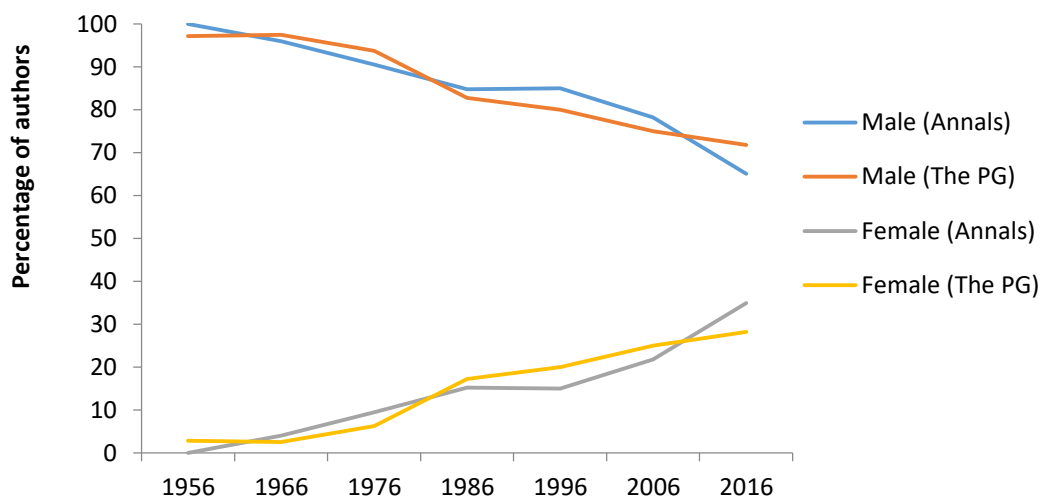
A total of 535 authors contributed to items published in the four AAG journals across all issues of 2016. Of these, 351 (66%) were male and 184 (33%) were female³¹. Table 2 shows some differences between the journals, with *GeoHumanities* being the most gender balanced with 48% male and 52% female contributors in 2016, and the *AAG Review of Books* being the most gender skewed with 80% male and 20% female contributors in 2016.

Table 2: Gender balance of contributors to items published in AAG journals, 2016

	<i>Annals of the AAG</i>	<i>The Prof Geographer</i>	<i>AAG Review of Books</i>	<i>Geo Humanities</i>	Total
Male	140	107	55	49	351
Female	75	42	14	53	184
Total	215	149	69	102	535

The gradual convergence towards gender parity over time from almost 100% authorship by men to 65-70% men is shown in Figure 9. Data was gathered from the two longest-running AAG journals, the *Annals of the AAG* and *The Professional Geographer*, taking volumes at decadal intervals (from 1956 to 2016) as a sample and snapshot³².

Figure 9: Authors of articles in *Annals of the AAG* and *The Professional Geographer* by gender, 1956-2016



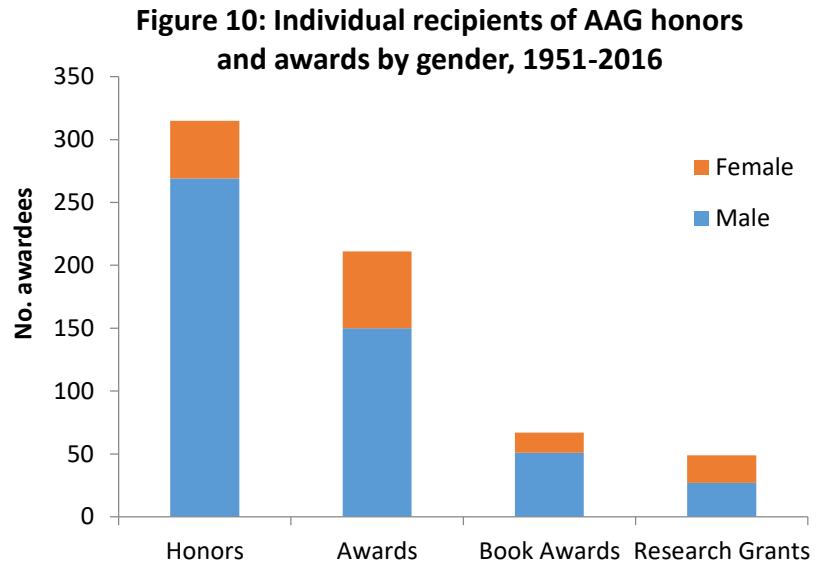
³¹ Source: Table of contents of each issue.

³² Source: Table of contents of each issue; the count included substantive content such as research articles, commentaries, technical notes, editorials, presidential addresses, and memorials, but excluded book reviews, association notes, correspondence, and editor reports.

AAG Honors and Awards

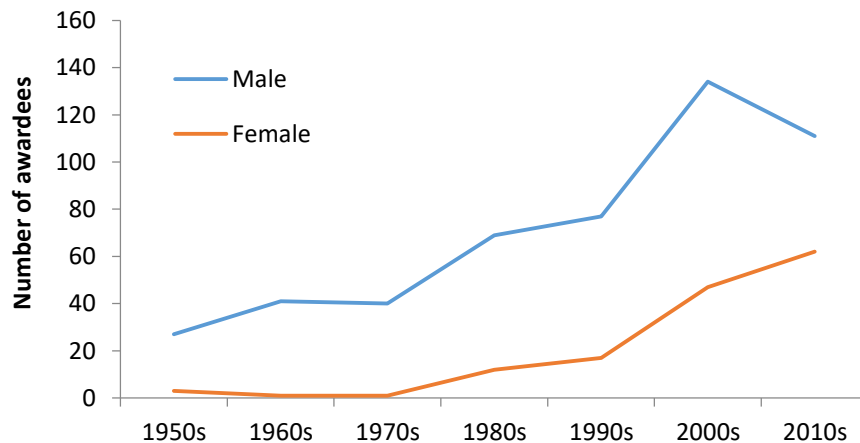
Between 1951 and 2016, there were a total of 651 recipients of AAG Honors and Awards³³. Aside from the 9 recipients that were organizations, the individuals comprised 497 (77%) men and 145 (23%) women.

The distribution of recipients by the major categories of award is shown in Figure 10. By proportion, males were the recipients of 85% of AAG Honors, 71% of AAG Awards, 76% of AAG Book Awards, and 55% of AAG Research Grants.



Looking at recipients of honors and awards by decade, the growth of female recipients has matched the growth of male participants, as shown in Figure 11. By proportion, there is a gradual move towards gender balance; in the 1950s, 90% of recipients were male but by the 2010s only 64% recipients were male.

Figure 11: Individual winners of AAG honors and awards by decade, 1950s to 2000s



³³ Sources: AAG Handbook 2016, pp25-36 and lists on individual honors and awards webpages www.aag.org/cs/grantsawards; together these are not a completely comprehensive list of all AAG awards through time but represents a large sample.

Other Awards and Honors

Finally, in terms of geographers' representation in the academy more widely, Table 3 shows the gender balance of those elected to prestigious organizations or recipients of major fellowships³⁴. The gender imbalance here is stark, ranging from 83% to 95% male representation.

Susan Hanson was the first female geographer to be a member of the NAS and AAAS, both in 2000. She was also the first female to be a Guggenheim Fellow in Geography in 1989, and 10 of total of 14 women have been selected in the last ten years. The first MacArthur Fellow in Geography was selected in 2007.

Table 3: Geographers nominated or elected to prestigious organizations

	Male	Female
Geographer Members of the National Academy of Sciences (1863-2015)	41	4
Geographer Members of the American Academy of Arts and Sciences (1796-2014)	55	3
Guggenheim Fellows in Geography (1926-2016)	120	14
Geographer MacArthur Fellows (1981-2007)	5	1

Further information

Quantitative studies

[Where Are the Women? Accounting for Discrepancies in Female Doctorates in U.S. Geography](#)

By David H. Kaplan and Jennifer E. Mapes (2016) in *The Professional Geographer* 68 (3): 427-435

[Women in Economic Geography](#)

By Jessie PH Poon (2005) in *Environment and Planning A* 37: 765-768

[The representation of women in academic Geography: contexts, climate and curricula](#)

By Janice Monk, Joos Droogleever Fortuijn, and Clionadh Raleigh (2004) in *Journal of Geography in Higher Education* 28 (1): 83-90

[Female Representation in the Discipline of Geography](#)

By Sarah J. Brinegar (2001) in *Journal of Geography in Higher Education* 25 (3): 311-320

³⁴ Source: AAG Handbook 2016, pp37-39.

Qualitative research

[Changing Expectations and Institutions: American Women Geographers in the 1970s](#)

By Janice Monk (2006) in *The Geographical Review* 96 (2): 259-277

[Women, Gender, and the Histories of American Geography](#)

By Janice Monk (2004) in *Annals of the Association of American Geographers* 94 (1): 1-22

[Women's Worlds at the American Geographical Society](#)

By Janice Monk (2003) in *The Geographical Review* 93 (2): 237-257

[Many Roads: The Personal and Professional Lives of Women Geographers](#)

By Janice Monk (2001) Chapter 10 in Pamela Moss (ed.) *Placing Autobiography in Geography*, Syracuse: Syracuse University Press, pp.167-87

[Women in Geography in the 21st Century](#)

Focus Section (2000) in *The Professional Geographer* 52 (4): 697-758

Other references

[Women's Contributions to Geography and Cartography](#)

A set of articles by Alice C. Hudson and Mary McMichael Ritzlin, Geography and Map Division, Library of Congress

['Practically All the Geographers Were Women'](#)

By Janice Monk (2008), presentation at *Society of Woman Geographers Triennial*

***The full datasets used to compiled this report are available
to download from the Disciplinary Data Dashboard:***

<http://www.aag.org/disciplinarydata/gender>

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