SOCIOPOLITICS IN SOUTHEASTERN ARCHAEOLOGY: THE ROLE OF GENDER IN SCHOLARLY AUTHORSHIP

DANA N. BARDOLPH AND AMBER M. VANDERWARKER

Department of Anthropology, University of California, Santa Barbara, CA, USA

We explore the relationship between gender, authorship, and editorship in conference presentations and publications as a lens to examine current disciplinary sociopolitics and the relative contributions of men and women to southeastern archaeological research. We also report on the results of a survey on publishing trends in southeastern archaeology that we circulated to the Southeastern Archaeological Conference (SEAC) membership in March 2014. The evaluation of publishing trends serves as a means to investigate academic merit and visibility, along with the production and validation of knowledge in southeastern archaeology. We document a strong gender imbalance in publication rates across a range of publication venues, including regional journals, state archaeology journals, and edited volumes, despite growing numbers of women presenting research at SEAC meetings. We discuss possible reasons for these gender disparities based on survey response data from members of the SEAC community. Despite a current culture and context of women's advancement in southeastern archaeology, many challenges and obstacles remain.

Keywords: Gender equity, Southeastern archaeology, Publication, Sociopolitics, Women in science

There has been a recent resurgence of interest in the many ways in which gender politics (and often outright discrimination) affect the archaeological community (e.g., Bardolph 2014; Baxter 2005; Burkholder 2006; Hutson 2002; Levy 2014; Meyers et al. 2015; Sullivan 2014; Wright 2002). as well as the broader academy (e.g., Ceci et al. 2014; Clancy et al. 2014; Clauset et al. 2015; Fox and Colatrella 2006; Hutchinson and Jenkins 2013; Larivière et al. 2013; Sax et al. 2002; Symonds et al. 2006; West and Curtis 2006; West et al. 2013; Wolverton et al. 2014). While women in the United States have made great strides in establishing parity with their male counterparts in educational attainment, discrepancies remain with respect to academic hiring practices, promotion, grant-funding success, fieldwork opportunities, and other general advancement opportunities for women in archaeology and other disciplines nationwide. These issues certainly impact the southeastern archaeological community, which has both a reputation of being a "male-dominated group" (Claassen et al. 1999:85) and a long history where women's contributions largely have gone underrecognized (White et al. 1999). The underrepresentation of women's contributions is embedded within a larger history of American archaeology in which men emerged as leading field investigators

and grand synthesizers, and women were often relegated to what some have perceived as less-desirable subfields, including as laboratory specialists (e.g., Claassen 1994; Clarke 1993; Gero 1985, 1994; Gifford-Gonzales 1994; Moser 2007).

In this paper, we consider gendered trends in conference presentations and publications to explore another source of unevenness affecting southeastern archaeological community (sensu Bardolph 2014). Specifically, we analyze gendered patterns of participation at the Southeastern Archaeological Conference (SEAC) as well as publication in regional and state archaeology journals and edited volumes pertaining to southeastern archaeology from 2000 to 2013. It has been over 15 years since Claassen et al. (1999) treated this same topic; thus, this issue is ripe for reappraisal. Our findings indicate a continued discrepancy between the representation of men's work and women's work in the broader southeastern literature. We go a step beyond documenting gendered trends in presentation and publication, however, and report on the results of a survey on publishing trends in southeastern archaeology that we circulated to the SEAC membership in March 2014. The purpose of our paper is thus twofold: (1) we explore differential patterns of men and women's spoken and published work, to consider who has dominant control over current southeastern archaeological narratives; and (2) we discuss possible reasons for the discrepancies noted, based on response data from members of the practicing southeastern archaeological community. Overall, we conclude that despite a current culture and context of women's advancement in southeastern archaeology, many challenges and obstacles remain.

A Brief History of Sociopolitical Research

Over the past few decades, a large body of literature has been devoted to exploring the ways in which gender politics affect archaeological practice (e.g., Beaudry and White 1994; Claassen 1992, 1994; Conkey 2007; du Cros and Smith 1993; Gero 1985, 1994; Hutson 2002; Moser 1996; Nelson et al. 1994; Stark et al. 1997; Tomaskova 2007; Victor and Beaudry 1992; Wright 2003; Zeder 1997; for recent summaries, see Bardolph [2014]; Moser [2007]). As Wylie (1997:83) observed, studies on the demography, funding sources, training, and employment patterns of male and female archaeologists constitute "some of the most fine-grained and empirically rich work" conducted on disciplinary culture and sociopolitics. Feminist researchers in archaeology, particularly in the 1980s and 1990s, documented a number of troubling trends with respect to women's participation in the discipline. They found that while women appeared to be gaining gender equity on a number of fronts, including admission to and completion of graduate programs (Zeder 1997:3), women were not being hired in academia in proportion to their representation among Ph.D. recipients (Hutson 1998; Stark et al. 1997), and overall, women continued to be hampered by lower funding success, lower levels of job satisfaction and security, and lower levels of scholarly productivity.

These issues are not unique to archaeology; recent studies document similar discrepancies within the broader academy. Within the United States, after decades of high female enrollment in most Ph.D. fields, practices of academic institutions continue to systematically favor men (Ceci and Williams 2011; Clauset et al. 2015). Indeed, women occupy only 39 percent of full-time faculty positions in all academic disciplines and hold less than one-quarter of full professorships (West and Curtis 2006), take more time to get promoted than men (Misra et al. 2011), and still earn only 81 cents to every dollar earned by men, a

situation that has not changed since the 1970s (Curtis 2010). With respect to scholarly productivity, recent studies have shown that women account for less than 30 percent of all authors of scientific publications worldwide (Larivière et al. 2013; West et al. 2013). Bardolph's (2014) analysis of over 4,500 peer-reviewed journal articles and reports from 11 archaeology journals (broad and regional in scope, including Southeastern Archaeology) from 1990 to 2013, revealed that only 29 percent of papers have women as the lead author (for similar rates documented in earlier studies, see Beaudry and White [1994]; Claassen et al. [1999]; Victor and Beaudry [1992]). Bibliometric studies of citation practices (Hutson 2002; Larivière et al. 2013; Maliniak et al. 2013; McElhinney et al. 2003) have shown that in most scientific fields, articles written by women are consistently cited less frequently than articles written by men. Examining Southeastern Archaeology specifically, Hutson (2002:335) revealed that men cite women significantly less than women cite women (a trend witnessed in other archaeology journals; see also Beaudry and White [1994]).

In this paper, we extend the analysis of southeastern literature beyond the journal Southeastern Archaeology to include conference presentations, other regional and state-level archaeology journals in which southeastern archaeologists typically publish, and chapters in edited volumes encompassing southeastern research, to critically examine the presence and visibility of women's work. We also report on the results of our survey on publishing trends circulated to the SEAC membership in March 2014. We consider publication to be a useful lens for examining gender equity in southeastern archaeology for a few reasons—publishing is significant for scholarly visibility, along with getting jobs, tenure, grants, promotion, and awards, but it also reveals the social milieu of knowledge production. Publication also reflects the output of a large subset of the practicing southeastern archaeological community, namely, academics. Indeed, academics comprise nearly 60 percent of SEAC members (Table 1). Granted, not every southeastern archaeologist is a member of SEAC, but as the largest regional conference in the United States, with nearly 1,000 members (individual, life, joint, and student) working in a variety of settings, including colleges and universities, government agencies, museums, and the private sector, we believe that SEAC is a good proxy for evaluating

TABLE I CURRENT EMPLOYMENT SETTINGS FOR SOUTHEASTERN ARCHAEOLOGISTS (BASED ON SEAC MEMBERSHIP DATA COLLECTED IN 2013).

	N	%
Academia	551	59.6
Cultural Resource Management	162	17.5
Government	110	11.9
Museum	20	2.2
Nonarchaeology private sector	10	I.I
Archaeology nonprofit organization	10	I.I
Other	6	0.6
Unknown	56	6.1
Total	925	

the makeup of the practicing community. We acknowledge that there are myriad other equity issues facing those working in Cultural Resource Management (CRM), government, preservation, and business sectors, whose differing job requirements, expectations, and reward structures may not place an emphasis on publishing as a measure of success. We place our emphasis on publication data based on what they reveal about research climate and the social relations of knowledge production—those who publish shape the theoretical landscape of our discipline, put forth topics that archaeologists see as interesting or important, present ideas that shape future research, spur debates, and lead to paradigm shifts. Thus, we argue that publication data provide critical insight into current sociopolitics in the southeastern archaeological community, while recognizing a need for further studies focused on other subsets of practicing archaeologists. We also acknowledge that gender is only one of many intersectional factors that shape disciplinary culture and research climate. While considerations of race, ethnicity, class, and sexuality would make for a fully robust evaluation of gender equity in southeastern archaeology, we leave those issues aside as they are less accessible from publication data alone.

THE PUBLICATION DATA

Our two primary datasets include: (1) the publication data; and (2) the survey response data. We begin our discussion by focusing first on publication data. Our publication dataset includes information collected on gender, authorship, and editorship from SEAC conference proceedings,

two regional journals (Southeastern Archaeology and Midcontinental Journal of Archaeology), 13 state archaeology journals from midwestern and southeastern states, and 47 edited volumes that have a primary focus on southeastern archaeological research. Spanning the years 2000-2013, our data encompass over 6,000 conference presentations, articles, reports, and book chapters. Following methods outlined in Bardolph (2014), we collected data on the gender of the lead author for each conference paper and publication documented in this study (contributing authors and authors of book reviews, comments, and obituaries were omitted from this study), as well as all individuals who served as editors, either of journals or books. We determined the gender of individuals based on first name; if names were ambiguous, we classified them based on familiarity with the individual in question or from departmental or personal webpages. We recognize that we are actually identifying the presumed sex of these individuals and not necessarily their genders—it is possible that a few authors may have been incorrectly categorized because their names do not accurately reflect their genders. We assume those potential instances to be limited, however, and unlikely to affect the overall trends that we discuss in this paper.

We note that there are likely many publications in our sample with multiple authors with mixed gender representation. We focus our data collection on lead authors for two reasons, with some basic assumptions: (1) the lead author represents the individual responsible for doing most of the research and writing for a given study; and (2) the position of lead author is the most prestigious in terms of how studies are perceived by fellow practitioners, as well as how publications are evaluated for job opportunities, tenure, and promotion. We also recognize that there are many practicing archaeologists who work as private contract-based consultants whose main contributions are only accessible via gray literature. Thus, our assessment of gendered publication rates is biased primarily (although not exclusively) towards southeastern archaeologists who are academics and regularly publish in the broader academic literature.

SEAC MEETING PARTICIPATION AND PUBLICATION

We set the stage for evaluating gendered publishing trends by examining the makeup of the southeastern archaeological community. SEAC

membership serves as a good baseline for establishing who is currently conducting southeastern research. Membership rates have remained fairly constant since 2000, close to 60 percent male and 40 percent female (Supplemental Document 1; see also Levy [2014]). Of these members, we were curious to examine who was actively disseminating their research through presentations at SEAC, so we quantified the number of men and women that served as lead authors on conference papers or posters from 2000 to the present meeting. In an earlier study, Claassen et al. (1999) examined SEAC meeting data from 1983 to 1995; of a total of 972 conferences papers and posters presented over 7 years (they sampled every other year in their study), 72 percent were lead-authored by men and 28 percent were lead-authored by women. Data from 2000 to 2013 reveal that of a total of nearly 4,000 conference papers, 63 percent were lead-authored by men and 37 percent were lead-authored by women. The proportion of women presenting at SEAC meetings, while still less than men, has steadily risen, since Claassen et al.'s (1999) examination and throughout our study period since 2000 (Supplemental Document 2). Thus, the gender gap may be slowly narrowing in terms of who is presenting research at the regional conference. However, Claassen et al. (1999) reported that more men and fewer women were presenting papers than would be expected given their membership ratios. To examine this trend in our study sample, we compare female-to-male (F:M) ratios of society members to presenters from 2000 to 2013 using a box plot (Figure 1).

Although the use of box plots is increasingly common in archaeology, a description of this type of visual aid nevertheless bears repeating. Box plots display distributions of data using several key features (Cleveland 1994; McGill et al. 1978; Wilkinson et al. 1992). The hinges of the box represent the middle 50 percent of the data, while lines, or whiskers, extending from the box on either end represent the remaining top and bottom 25 percent of the distribution (outliers are depicted as asterisks). Notched box plots allow for significance testing; if the notched areas of any two boxes do not overlap, then the two distributions are statistically different at the .05 level. To calculate F:M ratios, we divided the number of females by the number of males for a given category per year (e.g., female and male members of SEAC, or the number of articles and reports published in Southeastern Archaeology written by

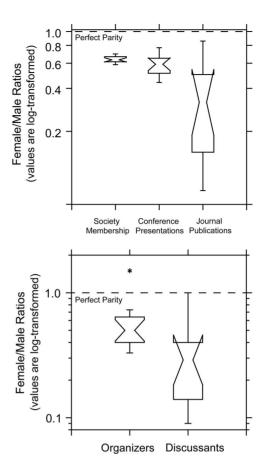


FIGURE 1. Box plots of female-to-male ratios of SEAC membership, participation in SEAC meeting, and publication in *Southeastern Archaeology* (2000–2013).

women and men). We also include a perfect parity line in our box plots, where the F:M ratio equals 1.0. Data points that fall on the perfect parity line indicate an equal number of men and women represented in a particular category (SEAC membership, conference presentations, publications, etc.) in a given year.

A comparison of SEAC member data to conference presentation data reveals that lower numbers of women are presenting at SEAC meetings compared to their representation in the society, although this difference is not statistically significant (see Figure 1). The narrow hinge spread in the box plot of membership ratios (i.e., the particularly constricted hourglass in the box) indicates little variation year-to-year in the number of female members in the society, compared to lower presentation rates at the annual meetings by women. All of the data represented in the box plots fall below the perfect parity line, indicating that between 2000 and 2013, there was not a single year in which women were represented in the society or presenting conference papers or

posters in an equal proportion to men. We also examine the proportion of women involved in organizing symposia, as well as those serving discussant roles (see Figure 1; see also Baires and Henry [2015]). A comparison of F:M ratios of symposia organizers with discussants between 2000 and 2013 reveals two interesting trends: (1) women organized symposia and served as discussants at a much lower rate than men, with the majority of data points in both categories falling well below the perfect parity line;2 and (2) if women were involved in those roles, significantly more women served as organizers than they did as discussants. As Claassen et al. (1999:92) have noted, symposium data can reveal a lot about the sociopolitics of knowledge dissemination and validation in archaeology. Symposia discussants are invited because they are perceived experts or authorities on a given topic; thus, this aspect of SEAC meetings remains male-dominated, even when themes of symposia deemed worthy of exploring are constructed by women.

We also compare conference presentation rates to publication rates in the society's journal, *Southeastern Archaeology*, as this journal represents a major outlet for the dissemination of southeastern research. Conference papers often serve as stepping-stones for publications, and

with rising numbers of women actively conducting and presenting research on southeastern archaeology, we might expect a proportional rise in female publications (often starting at the graduate level, as it is increasingly necessary for young scholars to have publications before entering the competitive academic job market). An evaluation of publishing trends in the society's journal does not support our expectation of a relative increase in female-authored publications. **Publications** in Southeastern Archaeology remain heavily male-dominated, and although there is variation throughout the study period, the majority of volumes since 2000 have been skewed toward male lead-authors (Table 2). Despite growing numbers of women participating in the SEAC meetings, women do not appear to be making the push from presenting to publishing as often as men. Indeed, a comparison of F:M ratios reveals that women publish in the society journal at significantly lower rates than they present at the meetings, which, as discussed above, already stands at a lower rate in proportion to their society membership (see Figure 1).

We also considered the issue of repeat authors, and quantified the number of men and women who published two or more articles in

Table 2 Female and male publishing trends in Southeastern Archaeology (2000–2013) and Midcontinental JOurnal of Archaeology (2000–2013).

		Southeasterr	n Archaeology	Midcontinental Journal of Archaeology							
	Female		Male		Fe	male	Male				
	n	%	n	%	n	%	\overline{n}	%			
2000	4	33.3	8	66.7	3	20.0	12	80.0			
2001	I	8.3	II	91.7	6	42.9	8	57.1			
2002	5	26.3	14	73.7	4	36.4	7	63.6			
2003	I	7.1	13	92.9	3	33.3	6	66.7			
2004	4	21.1	15	78.9	0	0.0	9	100.0			
2005	5	33.3	10	66.7	2	20.0	8	80.0			
2006	4	26.7	II	73.3	2	18.2	9	81.8			
2007	5	27.8	13	72.2	I	11.1	8	88.9			
2008	2	12.5	14	87.5	6	60.0	4	40.0			
2009	4	22.2	14	77.8	8	61.5	5	38.5			
2010	2	7.4	25	92.6	I	12.5	7	87.5			
2011	12	46.2	14	53.8	0	0.0	8	100.0			
2012	3	21.4	ΙI	78.6	3	20.0	I 2	80.0			
2013	6	40.0	9	60.0	I	33.3	2	66.7			
Total	58	24.I	182	75.8	40	27.6	105	72.4			

Southeastern Archaeology from 2000 to 2013.³ Of a total of 240 articles and reports published within that timeframe, 19 percent were published by repeat male authors (i.e., the same individuals publishing multiple times), in contrast to 10 percent that were published by repeat female authors. This difference in repeated publications between genders is statistically significant ($\chi^2 = 5.94$; $\alpha < .05$); in the case of Southeastern Archaeology, men are more likely to be prolific authors than women.

OTHER PUBLICATION VENUES

We broaden our analysis beyond Southeastern Archaeology to consider other venues in which southeastern and midwestern researchers typically publish, including Midcontinental Journal of Archaeology (MCIA) (Table 2) and state archaeology journals (Table 3). An examination of gendered publishing trends in MCJA from 2000 to 2013 reveals that, with the exception of 2008 and 2009, most volumes are heavily skewed towards male publications, including two years in which no articles or reports were lead-authored by women (see Table 2). We also consider data from 13 state archaeology journals (see Table 3). Initially, we began our review of state journals hypothesizing that they would display greater parity given that they might represent an alternate

TABLE 3 COMPOSITE VIEW OF MEAN FEMALE-TO-MALE PUBLICATION RATIOS FOR 13 STATE ARCHAEOLOGY JOURNALS (2000–2013).

Journal	Mean F/M ratio
Louisiana Archaeology	0.16
The Arkansas Archaeologist	0.16
Archaeological Society of Virginia Quarterly Bulletin	0.17
The Missouri Archaeologist	0.18
Tennessee Archaeology	0.23
North Carolina Archaeology	0.28
Early Georgia	0.31
South Carolina	0.35
Journal of Kentucky Archaeology ^a	0.38
Florida Anthropologist	0.41
Illinois Archaeology	0.43
The Mississippi Archaeologist	0.46
The Arkansas Archaeologist	0.55

^aPreviously the Published Proceedings of the Annual Kentucky Heritage Council Archaeology Conference.

publication venue for female archaeologists, who are poorly represented in the larger regional journals. Published by smaller society organizations, we assume that state-level archaeology journals generally have less competitive acceptance rates than larger regional journals, and that opportunities to publish in them may be more available to nonacademic archaeologists (e.g., CRM archaeologists), although data are needed to substantiate this claim.

We compiled mean F:M ratios of publications between 2000 and 2013 by leading state journal for 13 states in the greater southeastern/midwestern region (see Table 3). Although these ratios do not capture the variation from year to year for each journal, they generate cumulative trends.⁴ An F:M ratio of 1.0 would indicate that men and women were represented in equal rates across the study sample; none of the state journals approach that measure of parity.

Overall, there were very few years between 2000 and 2013 in which women and men published an equal number of studies in either regional or state journals, with the majority of volumes falling well below parity (Supplemental Document 3). To explore another potential publishing outlet, we consider authorship (and editorship) in edited volumes. We compiled data from 47 edited volumes published from 2000 to 2013 whose topics and contributions primarily encompass southeastern archaeological research. Selected from a broader review of academic and university presses, the edited volumes we consider come from a total of seven university presses and a large academic press (Springer Science + Business Media) that published southeastern research from 2000 to 2013 (Table 4). Of a total of 88 individuals that served as editors on these volumes, 60 percent were men and 40 percent were women. Of a total of 692 book chapters, 68 percent were lead-authored by men, and 32 percent were lead-authored by women. Thus, of the volumes we examined, men were represented more frequently as both editors and as authors overall. We also consider the relationship between editorship and authorship, to explore whether the gender of the volume editor had any bearing on the gender of contributing authors. A two-sample t-test of F:M ratios of editors and authors revealed that more book chapters lead-authored by women were published in volumes that had at least one female editor than those volumes edited solely by males, and this difference was highly significant $(t = -3.045; p\text{-value} = .004; df = 44).^5$

Table 4	Summary editorial and publishing statistics for men and women in southeastern edited volumes (2000)) —
	2013).	

Press	Relevant volumes, <i>n</i>	Male editors, <i>n</i>	Female editors, <i>n</i>	F:M ratio editors	Male authors, n	Female authors, <i>n</i>	F:M ratio authors
University of Alabama Press	18	19	Ι2	0.632	175	65	0.371
University Press of Florida	16	12	15	1.250	143	86	0.601
University of Illinois Press	I	2	I	0.500	16	14	0.875
Louisiana State University Press	I	I	0	0.000	12	5	0.417
University Press of Mississippi	I	2	0	0.000	9	3	0.333
University of Nebraska Press	3	6	I	0.167	42	10	0.238
University of Tennessee Press	4	4	4	1.000	38	24	0.632
Springer Science + Business Media	3	4	0	0.000	39	11	0.282
Total	47	50	33		474	218	

Comparing gendered publication ratios in edited volumes to journals, we found no substantive difference between the two types of publishing venues (Supplemental Document 4). Of the 2,098 journal articles and book chapters analyzed for this study, only 26 percent were lead-authored by women. These data indicate that despite the number of women actively doing research in southeastern archaeology, with growing numbers of women participating in the annual meetings, women continue to lag behind men in publishing their research.

Having established differential productivity rates between men and women, we next consider possible causes. It is important to note that the data on gender and authorship do not necessarily reflect discrimination (conscious or unconscious) on the part of editors or reviewers. Some small studies by journal editors of American Antiquity (Rautman 2012) and Historical Archaeology (Beaudry 1994) reveal that women submit manuscripts (and return them if accepted pending revisions) at a much lower rate than men, despite nearly identical acceptance/rejection rates. A similar submission bias has been noted recently for National Science Foundation (NSF) archaeology research grant proposals; Society for American Archaeology (SAA) annual meeting forums in 2013 and 2014 have addressed the fact that senior (i.e., post-Ph.D.) male PIs submit NSF

proposals nearly twice as frequently as senior females, although award rates are essentially identical. To determine whether a similar submission bias is occurring in the southeastern community, and to explore other potential factors for the gender discrepancies in publication, we turn to the second major dataset we include in this study, the 2014 SEAC member survey.

THE SURVEY RESPONSE DATA

In order to understand some of the reasons for the large gender disparities in publishing discussed in this paper, we designed a survey to better understand authorial behavior (i.e., what factors contribute to decisions about manuscript submission and publication rates among southeastern archaeologists). Our goal was to solicit feedback from SEAC members in all job settings (students, academics, CRM, government, museum, etc.), including those who have never published research or do not publish regularly. We designed a survey with 24 questions (some of which had subsidiary questions), which covered demographic information, conference presentation rates, journal submission and publication rates, resubmission patterns, hypothetical publication strategies, and limiting factors on writing/producing manuscripts. Following approval from the SEAC board and beta-testing

with members of the University of California, Santa Barbara Anthropology Department, we disseminated the survey to the SEAC membership via the online survey platform SurveyMonkey. In total, we received 335 responses, 36 percent of the total membership in 2013, representing a ±5 percent statistical margin of error. For the purpose of this paper and due to space constraints, we focus on responses to survey questions that demonstrated clear gender differences.⁶ In some cases, we present data from a subset of the survey pool (e.g., graduate students, or academics with Ph.D. s) if patterns were particularly telling for these groups. Otherwise, we report our responses for the entire sample. As each respondent did not necessarily answer every question, we use percentages rather than counts in our displays of data. We ran chi-square (χ^2) tests for the majority of the responses and report results that were statistically significant at the .05 level. We recognize that there are issues of validity with self-reporting in this type of survey questionnaire; it is possible that some responses were understated, exaggerated, or approximated. However, when constructing the survey, we made every attempt to avoid leading questions, created opportunities for respondents to expand upon their replies, and assured confidentiality in order to minimize validity issues with self-reporting as much as possible.

DEMOGRAPHIC TRENDS

Of the total respondents, 34 percent of the respondents were women (n = 114), and 66 percent were men (n = 220). As discussed above, SEAC membership is approximately 60 percent male and 40 percent female, so slightly fewer women responded given their membership rate. An interesting caveat to consider is that it is possible that those who do not publish regularly (or do not perceive themselves to be publishing regularly) are less likely to take a survey about publication strategies than those who do, which may be one possible reason why there were fewer female respondents. Ages of survey respondents ranged from 22 to 85 years. Ninety-six percent of the survey population described their racial/ethnic heritage as white (less than I percent of the membership identified as either American Indian or Latino/Chicano, with the remainder reporting as other), an equity issue that we cannot elaborate upon here. The majority of our respondents were academics, followed by those employed in private CRM firms, government agencies, and museums, and finally retirees (Table 5). Examining subsets of the survey population, equal proportions of male and female graduate students responded; of the respondents that identified themselves as graduate students, 49 percent were male (n = 27) and 50 percent were female (n =28). Of all of the men that responded to the survey, 53 percent (n = 116) reported Ph.D. as their highest education level, and of all of the women that responded, 44 percent (n = 50)reported Ph.D. as their highest education level. Of those individuals with Ph.D.s that listed academic positions, however (a total of 116 individuals), only 34 percent were women (n = 39), in contrast to 66 percent men (n = 77). These data indicate that women are not being hired in academic positions in the same proportion that they are receiving advanced degrees, a trend noted in the late 1990s by other researchers for the archaeology profession at large (Hutson 1998; Stark et al. 1997; Zeder 1997), and one that appears to be continuing (see Sullivan [2014]). As full-time, tenure-track hiring has declined steadily over the past several years (and likely will continue to do so), there may be even less opportunity for women (and men) to secure employment as professional academic archaeologists, which may have implications for future publication trends.

Further interesting demographic trends emerged from our sample. With regards to marital status, while large differences did not emerge between genders across the entire sample, far fewer female graduate students reported being married or partnered than their male counterparts—37 percent of female graduate students reported being married/partnered, in contrast to 60 percent of male graduate students that were married/partnered. And while the majority of graduate students do not have dependents, for those that do, far fewer women reported having dependents (3 percent of women listed having dependents vs. 16 percent of men). This particular consideration of graduate student life is noteworthy, in that it might reflect a broader tendency for women to wait to get married and have children when pursuing higher education (particularly a Ph.D.), one of many broader structural constraints of gender that have historically impacted women's careers.

With regard to annual income, an interesting gendered pattern emerged amongst academics with a Ph.D. While the annual income of both women and men peaks between \$61 and 80,000, the \$100,000 + salary range is dominated by men

Table 5 Current employment settings and basic demographic information for Southeastern Archaeologists (based on survey response data from March 2014).

Employment setting	n	%
Academics	160	48
Private CRM firm	56	17
Government	41	12
Museum	15	5
Retired	37	II
Other	25	7
Total	334	100

	Female		N	Male
	n	%	n	%
Annual income ^a				
\$21,000-40,000	I	3.1	2	3.2
\$41,000-60,000	9	28.1	17	27.4
\$61,000-80,000	II	34.4	18	29.0
\$81,000-100,000	7	21.9	10	16.1
\$101,000+	2	6.3	13	21.0
Not reported	2	6.3	2	3.2
Academic position ^a				
Adjunct/lecturer/visiting	2	6.2	4	6.6
Assistant professor	6	18.7	10	16.4
Associate professor	13	40.6	12	19.7
Full professor	9	28.1	28	45.9
Emeritus/a	0	0.0	4	6.6
Postdoctoral researcher	I	3.1	0	0.0
Research staff	I	3.1	I	3.3
Other	0	0.0	2	1.6

^aThese data reported only for academics with Ph.D.s

(see Table 5). This pattern is likely related to academic rank (see Table 5); the survey response data indicate that women peak at the Associate Professor rank (40 percent of females vs. 20 percent of males), whereas men peak at the Full Professor rank (45 percent of males vs. 28 percent of females), and this difference is statistically significant ($\chi^2 = 5.53$; $\alpha < .05$). There are also no female emerita faculty members in our sample. Although demographics appear to be shifting towards greater parity in lower academic ranks (our data show a fairly even gender representation for assistant professors, adjuncts, research staff, etc. [see Table 5]), the proportions of women at the full professor rank remain limited (a trend documented more broadly in the academy, see Fox and Colatrella [2006]; Misra et al. [2011]). These older structuring principles of the field, in which

males continue to dominate senior faculty positions (and mentoring roles), likely have a large impact on the publication trends we document in this paper.

To further explore reasons for the gendered publishing disparities, we turn to a discussion of submission and publication rates based on responses from our survey sample. Authorial behavior, rather than overt editorial or reviewer bias, may be affecting gendered publishing rates in the southeastern archaeological community. Data on submission and acceptance/rejection rates, which generally are not collected, retained, or made public by journal editors, are needed to test this issue. We thus asked survey respondents to report: (1) the number of manuscripts they submitted; and (2) the number of manuscripts they published as lead author, both annually and

cumulatively since 2000. To assess trends documented in the publication dataset above, we queried SEAC members about their submission to and publication in *Southeastern Archaeology* and state archaeology journals, along with general submission tactics and trends. We present these data in the sections below.

GENERAL ANNUAL SUBMISSION AND PUBLICATION RATES

Graduate students reported low annual submission rates overall; the majority reported submitting either no manuscripts on an annual basis or no more than two (Figure 2). Regardless of gender, male and female graduate students appear to be submitting and publishing at the same rate (i.e., if they submit manuscripts in the first place, then they do tend to get published). Academics with a Ph.D. peak at one to two annual submissions and publications, with fairly comparable rates of both (Figure 3). However, more women with a Ph.D. reported no annual submissions than men with a Ph.D., and no women reported five plus submissions. Across the entire

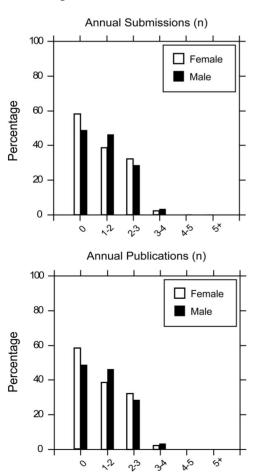


FIGURE 2. Bar charts of annual submission/publication rates reported by survey respondents (graduate students).

sample, the survey data indicate that women tend to submit fewer manuscripts than men (Figure 4). Forty-nine percent of all female respondents reported submitting no publications per year. Approximately 35 percent of all women in the sample submit one or two manuscripts per year, and none have submitted more than five manuscripts per year. Men, on the other hand, tend to submit manuscripts more regularly (see Figure 4). Only 27 percent of all male respondents reported no submissions per year (versus 49 percent of women) and 53 percent of males reported submitting at least one or two manuscripts per year. This difference in submission is highly significant ($\chi^2 = 13.5$, $\alpha < .01$). If men and women submit, then they are likely to get published; thus, a major issue appears to lie in lower initial submission rates by women.

SUBMISSION AND PUBLICATION SINCE 2000

Turning to Southeastern Archaeology specifically, we note an interesting finding regarding

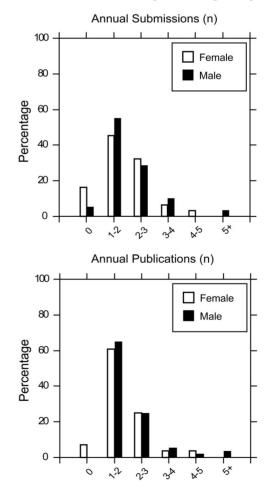


FIGURE 3. Bar charts of annual submission/publication rates reported by survey respondents (academics with a Ph.D.).

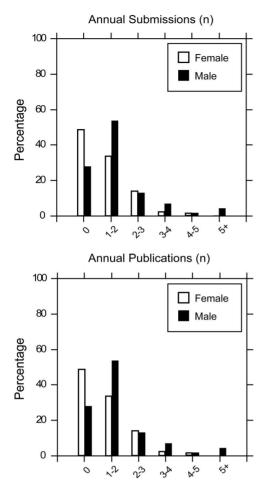


FIGURE 4. Bar charts of annual submission/publication rates reported by survey respondents (entire sample).

submission trends: since 2000, more female respondents (percentage relative to total female respondents) reported submitting manuscripts to the journal than males. However, these females actually reported slightly lower publication rates than their male counterparts (although this difference is not statistically significant) (Supplemental Document 5). With regards to state archaeology journals, more men have submitted to state journals since 2000 (59 percent vs. 40 percent of women) (Supplemental Document 6). As we note with respect to general annual publications above, it appears that if people submit to state journals, then they are likely to get published, regardless of gender. The lower initial submission issue is likely why more male-authored publications are witnessed in state journals. Further patterns emerge when submission to and publication in any and all academic journals are considered. For academics with a Ph.D., more women reported submitting no publications since 2000 than men (14 percent of women vs. 2

percent of men), and more men reported submitting 11 + publications than women (27 percent of men vs. 10 percent of women) (Supplemental Document 7). Regarding the number of manuscripts actually published since 2000, no clear gender difference was observed until seven or more publications; in this range, women peak at seven or eight publications vs. an 11 + publication peak for men, and this difference is statistically significant ($\chi^2 = 5.28$; $\alpha < .05$). For the entire sample, we note this submission problem again; 45 percent of women reported not submitting any manuscripts since 2000 (Supplemental Document 8). If women do submit manuscripts, then they peak at one or two publications vs. higher numbers (three or four, five or six, etc. publications) for men, with a statistically significant difference (χ^2 = 6.57; α < .05). A significant difference was also noted between the seven to eight vs. 11 + publications for women and men, respectively (χ^2 = 6.49; α < .05), a pattern also witnessed for the subgroup of academics with a Ph.D.

We also surveyed members about their publication in edited volumes. Fewer women reported publishing in edited volumes since 2000 than men. In our survey sample, 50 percent of women have not published in any edited volumes since 2000, vs. 35 percent of men, a difference that is statistically significant ($\chi^2 = 5.92$; $\alpha < .05$). This trend is interesting in that volume editors typically invite colleagues to contribute (rather than relying on blind submissions), and women are still less represented than men in this venue.

REVISE AND RESUBMIT TACTICS AND OTHER PUBLICATION STRATEGIES

To gain further perspective on authorial behavior, we surveyed the membership about decisions to revise and resubmit manuscripts. Among academics with a Ph.D., more men than women reported that they always revise and resubmit to the same venue if asked to do so after the first round of review (with a close to significant difference), and some women reported that they rarely revised and resubmitted to the same venue, whereas no men reported this behavior (Figure 5).8 Across the entire sample, looking specifically at women, for those who have had a manuscript rejected, more women reported only occasionally or rarely resubmitting to a different venue, rather than always or frequently resubmitting, suggesting that more women than men discard a manuscript after its rejection (see

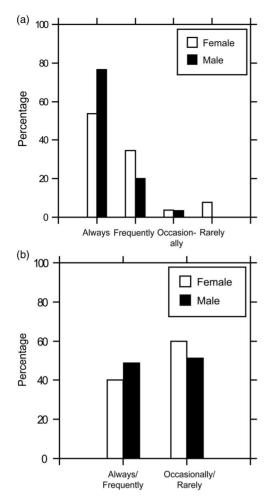
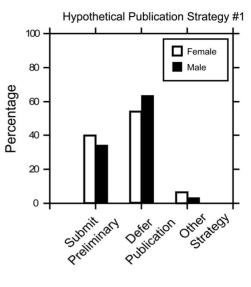


FIGURE 5. Bar charts of revise and resubmit tactics reported by survey respondents.

Figure 5). Overall, it appears that higher numbers of men are revising and resubmitting, either to the same venue if asked to, or to a different venue if rejected, than women.

We also queried the membership about two hypothetical publication strategies (Figure 6). Our first scenario asks: "You have found an interesting pattern in your data that might be bolstered by a secondary dataset that you have not yet analyzed. In general, what is your publication strategy?" Our expectation was that more women would defer publication until the secondary dataset was fully analyzed. The survey results, however, indicate the opposite trend; across our entire sample, more men than women reported that (hypothetically) they would defer writing until analysis of the secondary dataset was complete over the alternative strategy of submitting a preliminary article on the first dataset.9 Our second hypothetical scenario asks: "You have full access to datasets from three different sites. In



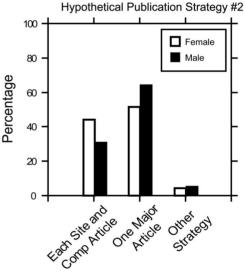


FIGURE 6. Bar charts of two hypothetical publication strategies reported by survey respondents (entire sample).

general, what is your publication strategy?" There were several possible responses, including: (1) publish on each site independently, followed by a broader comparative article; (2) publish one major article that includes all datasets; and (3) open-ended response for other strategies that a respondent might employ. As with the scenario above, our expectation was that that men would seek to garner more publications than women, choosing the first response in greater proportions. However, the survey results indicate that more women than men reported that they would publish on each site independently, followed by a broader comparative article (n = 4 articles), rather than publish one major article that includes all datasets—this difference was statistically significant ($\chi^2 = 4.78$; $\alpha < .05$). These results are curious, because if indeed female authors are enacting the strategies that they report for these two scenarios (more often than male authors), then we would expect women to generate higher numbers of publications in relation to their male counterparts. As we see from the data presented above on publication rates, however, women are lagging significantly behind men in this regard.

LIMITING FACTORS

An important component of our survey addressed limiting factors that inhibit the ability to produce manuscripts. We first queried respondents about time spent writing/revising manuscripts on a weekly basis. Across the entire sample, 34 percent of women reported spending zero hours writing per week vs. 22 percent of men, a difference that is statistically significant ($\chi^2 = 3.93$, α <.05). Of those individuals who do spend time writing each week, there is a proportionate distribution over the time categories for both men and women (Supplemental Document 9). Some interesting trends emerged in our queries about which factors limit one's ability to write or produce manuscripts. Some gender differences emerged with respect to all respondents with a Ph.D. (not just academics), although these differences were not statistically significant (Table 6). More men than women reported administrative work as a factor; open-ended response data limiting

indicated that some of these administrative duties corresponded with the duties of department chairs, senior-level positions in CRM firms, or other director responsibilities. More women than men reported having a paid position that does not prioritize publication, which likely corresponds with the trend documented above that less women are tracking into the academy post-doctorate. More women than men also listed parenting/family care and teaching/mentoring students as limiting factors. In contrast, more men than women indicated that nothing limits their ability to write or produce manuscripts.

Data from graduate student respondents reveals further interesting trends (see Table 6). General graduate student duties are the biggest limiting factor on writing/producing manuscripts, reported by more than 60 percent of students and encompassing both genders. Students also reported anxiety (about their ability to write) as a significant limiting factor—this factor was cited by three times as many women than men. Female graduate students also reported having a paid position that does not prioritize publication (as a limiting factor), whereas no male graduate students did. Significantly more males reported parenting/family care as a limiting factor amongst graduate students $(\chi^2 = 5.92; \alpha < .05)$; as discussed above, while graduate students in general are less likely to have dependents, if they do, then men are more likely to have them than women (a trend possibly

TABLE 6 FACTORS LIMITING THE ABILITY TO WRITE AND PUBLISH RESEARCH OF SURVEY RESPONDENTS.

Limiting factors		Respondents with Ph.D.s				Graduate students				Entire sample			
	Female		Male		Female		Male		Female		Male		
	n	%	n	%	n	%	n	%	n	%	n	%	
Administrative work	3	7.0	26	26.0					6	6.1	36	18.9	
Anxiety	2	4.7	3	3.0	4	14.3	I	4.8	9	9.2	9	4.7	
Committee work	3	7.0	2	2.0					4	4.1	2	I.I	
Graduate student duties	1	2.3	I	1.0	17	60.7	14	66.7	18	18.4	15	7.9	
Grant writing	I	2.3	I	1.0			I	4.8	2	2.0	2	I.I	
Paid position with no priority for writing	7	16.3	10	10.0	4	14.3			21	21.4	44	23.2	
Lack of mentorship					I	3.6	I	4.8	2	2.0	4	2.1	
Negative reviewer feedback	I	2.3	I	1.0					I	1.0	3	1.6	
No limiting factors	I	2.3	12	12.0					2	2.0	19	10.0	
Parenting/family care	5	11.6	6	6.0	I	3.6	4	19.0	7	7 . I	14	7.4	
Teaching/mentoring students	16	37.2	29	29.0	I	3.6			17	17.3	30	15.8	
Other	3	7.0	9	9.0					9	9.2	12	6.3	
Total factors listed by respondents	43		100		28		21		98		190		

related to women delaying reproduction while pursuing higher education, particularly a Ph.D.).

Across the entire sample, having a paid position that does not prioritize publication impacts the most individuals, regardless of gender (Table 6). Multiple respondents noted in open-response data that writing manuscripts is a primarily an academic undertaking—the current paradigm for compliance-driven archaeology, whether conducted by government agencies or private-sector professionals, is not often conducive to publishing research, so those employed in nonacademic sectors do not spend time writing or publishing. Similar to those individuals with a Ph.D. discussed above, more men than women report administrative work as a limiting factor, and more men indicate that nothing limits their ability to write or produce manuscripts (10 percent of men vs. 20 percent of women, a difference that is statistically significant ($\chi^2 = 5.51$; $\alpha < .05$). In contrast, more women than men report anxiety regarding their abilities, a difference that was highly significant $(\chi^2 = 6.92; \alpha < .01)$. Thus, the anxiety/confidence issue is not restricted to graduate students; this gendered trend is witnessed across the sample in various job settings. This anxiety issue could certainly be a factor in the decision to submit a manuscript for review in the first place, or the decision to revise and resubmit after receiving negative reviewer feedback. 10 Respondents of both genders also provided a variety of open-ended responses elaborating among limiting factors, with the most common limiting factor being time, as well as balancing a life outside of archaeology, lack of preexisting deadlines for writing manuscripts (as opposed to other hard deadlines imposed at work), lack of domestic partnership to relieve time spent doing errands, and lack of interest/motivation, among other reasons.

SUMMARY AND DISCUSSION

This study provides a window into an important sociopolitical issue in southeastern archaeology—an unequal representation of men's work and women's work, with consequences for the measure of academic merit, as well as the production and validation of knowledge. In this paper, we have presented the results of our analyses of two datasets: a publication dataset spanning over 6,000 conference presentations and published articles, reports, and book chapters, and a survey dataset documenting the responses of 335 practicing southeastern archaeologists.

Our analysis reveals a troubling discrepancy in gendered publication rates. Despite growing numbers of women presenting southeastern archaeological research at SEAC meetings (although far fewer women are organizing symposia and serving as discussants than men), women publish in the society journal at significantly lower rates than they present at the meetings. Of over 2,000 articles, reports, and book chapters published between 2000 and 2013 on topics related to southeastern archaeology, only 26 percent were lead-authored by women.

General trends in our survey data help illuminate this discrepancy between representation and publication. An important consideration in evaluating gendered publication rates is whether the female/male representation of authors is proportionate to the demographics of academic employment. The structure of the academy is likely a major factor in terms of why we see fewer publications by women. Women comprise only 34 percent of the employed academics with a Ph.D. in our survey population (despite a higher representation of women reporting having a Ph.D.), and men dominate the senior academic positions (as well as the highest paid positions). Hiring of female southeastern archaeologists in R-1 institutions is proceeding at a slow pace, likely a result of overall diminishing tenure-track job availability as well as larger structural factors impeding women's hiring. It is likely that the differing job requirements, expectations, reward structures between academic and nonacademic jobs contributes to the predominance of male-authored publications discussed here (as well as the type of academic job, as primarily undergraduate-serving institutions may present a greater emphasis on teaching than publication). More women than men in our survey pool reported having a paid position that does not prioritize publication as a major limiting factor in their ability to write or produce manuscripts, likely related to the fact that fewer women than men are ending up in the academy postdoctorate, particularly in R-1 institutions. For those women with academic positions, the majority remain in the associate, rather than full, professor category.

These trends, in which fewer women are tracking into the academy postdoctorate (particularly in R-1 institutions) are embedded within a deep historical trajectory of gender bias that has provided a barrier to success for postgraduate women. This gender bias has been described by some scholars as a chilly climate (e.g., Parezo

and Bender 1994; Wylie 1993) that has made the difference between simply completing a Ph.D. and completing a Ph.D. that results in a successful scientific career. Certainly, many women (and men) choose to have satisfying and rewarding careers in archaeology in the nonacademic world. However, as a result, the discourse of archaeology has remained predominately controlled by men. We suspect that we will not really begin to see more even gendered publication ratios (and more even dissemination and valuation of archaeological knowledge) until the academy becomes more diversified and further promotes the hiring and advancement of women. Until then, as noted by Sullivan (2014:242), the judgment of the work of junior faculty members (including for tenure and promotion purposes) will continue to be overseen largely by senior men, and the training and mentoring of graduate students will continue to be dominated by men.

The problem of submission bias is another major factor in the uneven distribution of men's published work and women's published work. Our survey data reveal that women are submitting fewer manuscripts than men, both annually and within the past decade and a half to specific journals. Women also reported spending less time writing than men, and revising/resubmitting manuscripts at slightly lower levels than men. Our data indicate that if women (or men) submit manuscripts to journals, then they generally tend to get published; the lower numbers of female publications witnessed in our study appear to be a result of submission bias, rather than editorial or reviewer bias (although limitations in circles of interactions among scholars may certainly be contributing to these trends, discussed below).

A variety of limiting factors appear to affect the ability of women (and men) to produce manuscripts, with the primary reason that they have employment positions that do not prioritize publication. Administrative duties, teaching, anxiety about writing ability, and other factors also affect people's abilities to write and publish. However, certain factors are skewed more towards women, including parenting/family care, teaching/mentoring students, and anxiety regarding the ability to produce manuscripts. These factors, along with other institutional constraints, have historically been documented in the broader academy as affecting women's scholarly productivity (e.g., Bellas 1999; Finkel and Olswang 1996; Park 1996; Pedulla and Thébaud 2015) and are a result of deeply rooted historical trends that have excluded women's participation in science.

This project begins to elucidate some of the reasons behind women's lag in scholarly productivity in the field of archaeology, but we believe there is much more work to be done on why and how this lag occurs. Ultimately, we need finer-grained ethnographic work to determine why women continue to submit manuscripts and publish less than men, work that is open to questions about the social and political circumstances in which knowledge is created and received. We need to continue to identify tactics and strategies for supporting the many able women in our research community to publish articles and reports. One avenue we suggest relates to editorial tactics. Editorial structures differ among journals, but so can editors' decisions about how proactive to be in soliciting work from qualified scholars. Thomas Pluckhahn, former editor of Southeastern Archaeology, remarked in the 2012 SEAC executive meeting that submissions were down for the journal. He urged SEAC members to submit research for possible publication, and to encourage colleagues to do the same. Perhaps a more active recruitment tactic for the journal (including for thematic issues and sections) in which capable scholars, male and female, were invited to submit their work would result in more balanced submissions. Edited volumes are largely the product of invited groups of scholars, often with themes originating from organized conference symposia. The fact that a significantly higher proportion of women are publishing in edited volumes where at least one editor was a woman may have some bearing on this issue—an editor that actively invites and encourages colleagues to participate may relieve anxiety about submission and contribute to more gender parity (rather than relying on blind submissions, which is the common tactic of journal editors).

How decisions are made about which manuscripts should be sent out for review, as well as which reviewers to send them to, are relevant as well; editors might consider tracking gendered submission/acceptance rates, as well as reviewing the gendered composition of their invited reviewers and editorial boards. The above examples are just some suggestions of reflexive tactics that might promote more gender equity in published research—ultimately, we need more rigorous investigations into why women remain

underrepresented, in archaeology and other fields, and why our understandings of the past remain biased towards the studies engineered by a single dominant group.

Conclusion

While it is certainly true that gender roles and expectations in archaeology have changed in the past few decades since the first major inequities were exposed, our study reveals that imbalances continue within a crucial venue in which archaeological data are disseminated to the southeastern archaeological research community. The repetition of gendered imbalances in archaeological practice remains critical to the way the discipline is perceived, by both its practitioners and wider society. Certainly, a focus on publications alone does not give a full sense of the impact and visibility of women's work, in southeastern archaeology or in broader fields. There is much more work to be done to fully understand the disparities in representation of men's work and women's work, in the publication sphere and in other important sectors of archaeology. We encourage our colleagues to conduct other studies of gender equity issues affecting southeastern archaeologists, including within other sectors of the profession. Indeed, with the steady decline in tenure-track job availability and potentially increasing numbers of Ph.D. archaeologists seeking employment in the private sector, it is crucial that we gain a better understanding of gender effects outside of the academy. However, the publication and survey data discussed here illuminate an important aspect of knowledge validation and valuation that affects a substantial portion of the southeastern research community. The response of the SEAC membership to our survey provides fruitful insight into the issues at hand, and we hope that this article inspires our community to be more self-reflexive about how gender politics impact southeastern archaeology, past and present.

ACKNOWLEDGMENTS

This project could have not been completed without the help of many individuals, some of whom we are unable to thank here personally. We thank Meagan Dennison, Renee Walker, Sarah Baires, and Edward Henry for their invitation to participate in the SEAC symposia (2013 and 2014) where this research was initially presented. Ann Cordell, Kandace Hollenbach, Janet Levy, and Karen Smith graciously provided access to SEAC membership data, past and present. Glen Akridge, Jodi Barnes, Ashley Dumas, Ed Jackson, and Tom Pluckhahn provided us with tables of contents from journal

issues that were in press at the time of the study. We acknowledge the 2014 SEAC board members, including former president T.R. Kidder, for their approval of the survey distribution to the membership, and members of the University of California-Santa Barbara Department of Anthropology for beta-testing the survey before it was released. Tom Emerson and Greg Wilson provided thoughtful comments on earlier versions of this paper. The text greatly benefited from the constructive comments of editor Betsy Reitz, T.R. Kidder, and two anonymous reviewers for *Southeastern Archaeology*. Finally, we give our sincere thanks to the SEAC members who took our survey and provided profound insight into the issues at hand.

DATA AVAILABILITY STATEMENT

The underlying research materials for this article can be accessed at https://core.tdar.org/project/400917/gender-equity-in-archaeology-project, under the Gender Equity in Archaeology Project archived in the Digital Archaeological Record (tDAR, ID 400917). Materials can also be accessed at http://www.anth.ucsb.edu/vanderwar kerlab/research/databases, under Archived Databases in the Research and Collections tab of the UC Santa Barbara Integrative Subsistence Laboratory (ISL) website.

Notes

- I This trend is not just restricted to academia; 2013 survey data from federal agencies such as the Census Bureau, the Department of Education, and the Bureau of Labor Statistics reveal that women working full time/year round in the United States typically were paid just 78 percent of what men were paid (AAUW 2015).
- 2 The 2006 SEAC meeting evinced an equal proportion of male and female discussants, but all other years between 2000 and 2013 were heavily skewed towards male discussants. At the 2003 SEAC meeting, 23 men served as invited symposia discussants, and no women served as discussants.
- 3 For feasibility purposes, we did not evaluate repeat publishers for venues other than *Southeastern Archaeology*.
- 4 We present a composite view of state journal data because not every journal published a volume each year between 2000 and 2013.
- 5 We ran this same test for Southeastern Archaeology, but the results were not significant; publishing trends in that journal do not appear be attributed to the gender of the editor.
- 6 The full survey and results database is available on the Digital Archaeological Record (tDAR), under the Gender Equity in Archaeology Project (tDAR ID 400917, https://core.tdar.org/project/400917/gender-equity-in-archaeology-project). The results are also available on the UC Santa Barbara Integrative Subsistence Laboratory (ISL) website under Archived Database in the Research and

- Collections tab (http://www.anth.ucsb.edu/vanderwarker lab/research/databases).
- 7 One survey respondent listed "other" as his/her gender; for the purposes of this study, we exclude that individual's responses.
- 8 Academics with a Ph.D. (both men and women) reported that they are more likely to revise and submit to the same venue if asked to rather than not; no respondents reported that they *always* resubmit to a different venue, although a few reported that they sometimes will.
- 9 "Other" responses included that people would engage in both strategies, or that they would defer publication but present results online or at conferences first to get feedback.
- 10 It bears mention that if women are publishing less, then they are less likely to be invited to review other's work, as the general criteria for reviewer invitations typically include that the reviewer has previously published on the topic/area/method discussed in the submitted manuscript.

REFERENCES CITED

American Association of University Women (AAUW)

2015 The Simple Truth about the Gender Pay Gap (Spring 2015). Electronic resource, http://www.aauw.org/research/the-simple-truth-about-the-gender-pay-gap/, accessed August 6, 2015.

Baires, Sarah E., and Edward R. Henry

2015 Gender Roles and Archaeologists in the Southeast: Working Towards Equality. *Horizon and Tradition: The Newsletter of the Southeastern Archaeological Conference* 57(1):14–18.

Bardolph, Dana N.

2014 A Critical Evaluation of Recent Gendered Publishing Trends in American Archaeology. *American Antiquity* 79:522–540.

Baxter, Jane E.

2005 Gendered Perceptions of Archaeology: A Perspective from the SAA Member Needs Assessment Survey. *The SAA Archaeological Record* 5(4):7–9.

Beaudry, Mary C.

1994 Women Historical Archaeologists: Who's Counting? Archaeological Papers of the American Anthropological Association 5:225–228.

Beaudry, Mary C., and Jacquelyn White

1994 Cowgirls with the Blues? A Study of Women's Publication and the Citation of Women's Work in Historical Archaeology. In *Women in Archaeology*, edited by Cheryl Claassen, pp. 138–158. University of Pennsylvania Press, Philadelphia.

Bellas, Marcia L.

1999 Emotional Labor in Academia: The Case of Professors. *The Annals of the American Academy of Political and Social Science* 561:96–110.

Burkholder, Jo Ellen

2006 Doing It for Ourselves: Women and Participation in the SAA Annual Meetings. *The SAA Archaeological Record* 6(2):27–31.

Ceci, Stephen J., and Wendy M. Williams

2011 Current Causes of Women's Underrepresentation in Science. *Proceedings of the National Academy of Sciences* 108:3157-3162.

Ceci, Stephen J., Donna K. Ginther, Shulamit Kahn, and Wendy M. Williams

2014 Women in Academic Science: A Changing Landscape. *Psychological Science in the Public Interest* 15(3):75–141.

Claassen, Cheryl (editor)

1992 Exploring Gender through Archaeology. Monographs in World Archaeology No. 2. Prehistory Press, Madison.

Claassen, Cheryl (editor)

1994 Women in Archaeology. University of Pennsylvania Press, Philadelphia.

Claassen, Cheryl, Michael O'Neal, Tamara Wilson, Elizabeth Arnold, and Brent Landsell

1999 Hearing and Reading Southeastern Archaeology: A Review of the Annual Meetings of SEAC from 1983–1995 and the Journal Southeastern Archaeology. Southeastern Archaeology 18:85–97.

Clancy, Kathryn B.H., Robin G. Nelson, Julienne N. Rutherford, and Katie Hinde

2014 Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault. *PLoS ONE* 9(7): e102172. doi:10.1371/journal.pone.0102172.

Clarke, Anne

1993 Cultural Resource Management (CRM) as Archaeological Housework: Confining Women to the Ghetto of Management. In *Women in Archaeology: A Feminist Critique*, edited by Hilary du Cros and Laurajane Smith, pp. 191–194. Occasional Papers in Archaeology, Vol. 23. Canberra Department of Prehistory, Research School of Pacific Studies, Australian National University, Canberra.

Clauset, Aaron, Samuel Arbesman, and Daniel B. Larremore 2015 Systematic Inequality and Hierarchy in Faculty Hiring Networks. *Science Advances* 1:e140005. doi:10.1126/sciadv.140005.

Cleveland, William S.

1994 *The Elements of Graphing Data*. AT&T Bell Laboratories, Murray Hill.

Conkey, Margaret W.

2007 Questioning Theory: Is There a Gender of Theory in Archaeology? *Journal of Archaeological Method and Theory* 14:285-310.

Curtis, John W.

2010 Faculty Salary Equity: Still a Gender Gap? Electronic resource, http://www.aacu.org/ocww/volume39_1/feature.cfm?section=2, accessed December 3, 2013.

du Cros, Hilary, and Laura Jane Smith (editors)

1993 Women in Archaeology: A Feminist Critique. Occasional Papers in Archaeology Vol. 23. Canberra Department of Prehistory, Research School of Pacific Studies, Australian National University, Canberra.

Finkel, Susan K., and Steven G. Olswang

1996 Child Rearing as a Career Impediment to Women Assistant Professors. Review of Higher Education 19:123–139.

Fox, Mary F., and Carol Colatrella

2006 Participation, Performance, and Advancement of Women in Academic Science and Engineering: What is at Issue and Why. *The Journal of Technology Transfer* 31 (3):377–386.

Gero, Joan

1985 Socio-Politics and the Woman-at-Home Ideology. *American Antiquity* 50:342–350.

1994 Excavation Bias and the Woman-at-Home Ideology. Archeological Papers of the American Anthropological Association 5:35-42.

Gifford-Gonzalez, Diane

1994 Women in Zooarchaeology. Archeological Papers of the American Anthropological Association 5:157–171.

Hutchinson, Katrina, and Fiona Jenkins

2013 Women in Philosophy: What Needs to Change? Oxford University Press, Oxford.

Hutson, Scott R.

1998 Institutional and Gender Effects on Academic Hiring Practices. SAA Bulletin 16(4):19–21, 26.

2002 Gendered Citation Practices in *American Antiquity* and Other Archaeological Journals. *American Antiquity* 67:331-342.

Larivière, Vincent, Chaoqun Ni, Yves Gingras, Blaise Cronin, and Cassidy R. Sugimoto

2013 Bibliometrics: Global Gender Disparities in Science. *Nature* 504:211–213.

Levy, Janet E.

2014 What I Believe: Doing Archaeology as a Feminist. Southeastern Archaeology 33:226-237.

McElhinney, Bonnie, Marijke Hols, Jeff Holtzkener, Susanne Unger, and Claire Hicks

2003 Gender, Publication, and Citation in Sociolinguistics and Linguistic Anthropology: The Construction of a Scholarly Canon. *Language in Society* 32:299–328.

McGill, Robert, John W. Tukey, and Wayne A. Larsen 1978 Variations of Box Plots. *The American Statistician* 32:12–16.

Maliniak, Daniel, Ryan Powers, and Barbara F. Walter 2013 The Gender Citation Gap in International Relations. *International Organization* 67:889–922.

Meyers, Maureen, Tony Boudreax, Stephen Carmody, Victoria Dekle, Elizabeth Horton, and Alice Wright

2015 Preliminary Results of the SEAC Sexual Harassment Survey. Horizon and Tradition: The Newsletter of the Southeastern Archaeological Conference 57(1):19–35.

Misra, Joya, Jennifer Hickes Lundquist, Elissa Holmes, and Stephanie Agiomavritis

2011 The Ivory Ceiling of Service Work. *Academe 97* (1):22–26.

Moser, Stephanie

1996 Science, Stratigraphy and the Deep Sequence: Excavations vs. Survey and the Question of Gendered Practice in Archaeology. *Antiquity* 70:813–823.

2007 On Disciplinary Culture: Archaeology as Fieldwork and Its Gendered Associations. *Journal of Archaeological Method and Theory* 14:235–263.

Nelson, Margaret C., Sarah M. Nelson, and Alison Wylie (editors)

1994 Equity Issues for Women in Archaeology. Archaeological Papers No. 5. American Anthropological Association, Washington, D.C.

Parezo, Nancy, and Susan Bender

1994 From Glacial to Chilly Climate: A Comparison Between Archaeology and Socio-Cultural Anthropology.

Archaeological Papers of the American Anthropological Association 5:189–194.

Park, Shelley M.

1996 Research, Teaching, and Service: Why Shouldn't Women's Work Count? *The Journal of Higher Education* 67:46–84.

Pedulla, David S., and Sarah Thébaud

2015 Can We Finish the Revolution? Gender, Work-Family Ideals, and Institutional Constraint. *American Sociological Review* 80:116–139.

Rautman, Alison E.

2012 Who Gets Published in American Antiquity? The SAA Archaeological Record 12(2):25–26, 30.

Sax, Linda J., Linda Serra Hagedorn, Marisol Arredondo, and Frank A. Dicrisi III

2002 Faculty Research Productivity: Exploring the Role of Gender and Family-Related Factors. *Research in Higher Education* 43:423–446.

Stark, Barbara L., Katherine A. Spielmann, Brenda Shears, and Michael Ohnersorgen

1997 The Gender Effect on Editorial Boards and in Academia. SAA Bulletin 15(4):6-9.

Sullivan, Lynne P.

2014 What I Believe: Taking up the Serpents of Social Theory and Southeastern Archaeology. *Southeastern Archaeology* 33:238–245.

Symonds, Matthew R. E., Neil J. Gemmell, Tamsin L. Braisher, Kylie L. Gorringe, and Mark A. Elgar

2006 Gender Differences in Publication Output: Towards an Unbiased Metric of Research Performance. *PLoS ONE* 1(1):1–5. e127. doi:10.1371/journal.pone.0000127. Tomaskova, Silvia

2007 Mapping a Future: Archaeology, Feminism, and Scientific Practice. *Journal of Archaeological Method and Theory* 14:264–284.

Victor, Katherine, and Mary C. Beaudry

1992 Women's Participation in American Prehistoric and Historic Archaeology: A Comparative Look at the Journals American Antiquity and Historical Archaeology. In Exploring Gender through Archaeology, edited by Cheryl Claassen, pp. 11–22. Prehistory Press, Madison.

West, Jevin D., Jennifer Jacquet, Molly M. King, Shelley J. Correll, and Carl T. Bergstrom

2013 The Role of Gender in Scholarly Authorship. *PLoS ONE* 8(7): e66212. doi:10.1371/journal.pone.0066212.

West, Martha S., and John W. Curtis

2006 AAUP Faculty Gender Equity Indicators 2006. Technical Report, American Association of University Professors, Washington, D.C.

White, Nancy M., Lynne P. Sullivan, and Rochelle A. Marrinan

1999 Grit-tempered Women: Early Women Archaeologists in the Southeastern United States. University Press of Florida, Gainesville.

Wilkinson, Leland, MaryAnn Jill, Stacey Miceli, Gregory Birkenbeuel, and Erin Vang

1992 Systat Graphics. SYSTAT, Evanston.

Wolverton, Ann, Lisa Nagaoka, and Mimi Wolverton 2014 Breaking In: Women's Accounts of How Choices Shape STEM Careers. Stylus, Sterling, VI. Wright, Rita P.

2002 COSWA Committee Article: Gender Equity, Sexual Harassment, and Professional Ethics. *The SAA Archaeological Record* 2(4):18–19.

2003 Gender Matters: A Question of Ethics. In *Ethical Issues in Archaeology*, edited by Larry J. Zimmerman, Karen D. Vitelli, and Julie Hollowell-Zimmer, pp. 225–238. Altamira, Walnut Creek, CA.

Wylie, Alison

1993 Workplace Issues for Women in Archaeology. In Women in Archaeology: A Feminist Critique, edited by

Hilary du Cros and Laurajane Smith, pp. 245–258. Occasional Papers in Archaeology Vol. 23. Canberra Department of Prehistory, Research School of Pacific Studies, Australian National University, Canberra.

1997 The Engendering of Archaeology: Refiguring Feminist Science Studies. *Osiris* 12:80–99.

Zeder, Melinda

1997 The American Archaeologist: A Profile. AltaMira, Walnut Creek, CA.

NOTE ON CONTRIBUTOR

Correspondence to: Dana N. Bardolph, Department of Anthropology, University of California, Santa Barbara, CA, USA. E-mail: dbardolph@umail.ucsb.edu.

Dana N. Bardolph is a Ph.D. Candidate at the University of California, Santa Barbara. She conducts archaeological research in the Southeastern United States and the Peruvian Andes. She uses multiple methods to examine prehistoric domestic foodways, to assess how cooking practices, agricultural production, and the spatial dimensions of foodways shape identity construction and social life. She also researches ethical issues in contemporary practice, including gender equity in academic representation and publication.

Amber M. VanDerwarker (Ph.D. 2003, University of North Carolina-Chapel Hill) is a Professor of Anthropology at the University of California, Santa Barbara. She has been involved in field and laboratory work in Mexico, eastern North America, and Peru. Her research encompasses a variety of methods, regions, and themes that revolve around the relationship between humans and food in the New World, especially in the periods bracketing the shift to agriculture.

Reproduced with permission of the copyright owner. Further reproduction prohibited with permission.	out