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WOMEN'S STUDIES: BIBLIOMETRIC AND CONTENT ANALYSIS OF THE FORMATIVE YEARS

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Women's studies has emerged as a recognised academic specialty in recent years. We explored the social structure of the field by analysing bibliometrically all scholarly articles (n=1,302) and acknowledgements (n=595) appearing in three pioneering journals over a twenty year period. We analysed authors (n=1,504) and acknowledgees (n=3,252) in terms of gender. We also conducted a content analysis of all editorial statements (n=135) published by the three journals. Our results demonstrate the highly gendered nature of the field and the incompatibility of its publicly stated objectives.

BACKGROUND

THE EMERGENCE of women's studies as an academic specialty in the United States can be traced to the 1970s. As the field established a toehold in higher education, and as women's studies programmes subsequently proliferated on campuses across the country and also internationally [1], the concomitant growth of scholarly journals occurred [2]. Today, *Ulrich's* [3] lists more than 100 periodicals under the rubric 'Women's Studies' – 'Women's Interests' being a quite separate heading.

The journal literature of a field can furnish valuable insights into not only the substantive issues addressed by a community of more or less like-minded scholars but also into the social relations that define a particular domain. Specifically, bibliometric techniques can be used to expose the underlying social structure of a field by describing patterns of publication, co-authorship, citation, and acknowledgement [4–7].

Although some feminist critics, who have philosophical objections to the literary canon and its conventions, might argue that these protocols (acknowledgement, citations, footnoting etc.) constitute a "masculine" voice' [8, p. 138] or reflect 'the ideology of patriarchy' [9, p. 113], the editors of scholarly

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journals in women's studies seem mindful of the need to acknowledge formally one's academic debt, though the allusion to 'suffering' below signals a somewhat particular perspective. To quote Catherine Stimpson [10], the founding editor of *Signs*:

We would permit almost anything to be said about political points of view as long as it met certain rhetorical standards. Originality, cogency, respect for past scholarship. Not out of pedantry, but out of respect for the women who suffered to do it. You leave Mary Beard out of a footnote, you are not just being sloppy, you are demeaning Mary Beard.

For those interested in the evolution of a field, such as women's studies, bibliometric analysis can furnish a value-neutral description of social interaction and interdependence. Longitudinal content analysis of editorials and acknowledgements can contextualise and help explain these interactions.

AIMS AND METHODS

Women's studies is attractive as an object of bibliometric study because it is a highly constructed field, premised on ideological assumptions about exclusion and compensation [11]. As McDermott [8, p. 1] notes, journals in this field 'offer a rich area for research because they explicitly address the practices and processes of academic publishing while shaping the parameters of an available body of feminist research and contributing to the advancement of women's studies scholars'.

We focused on a sample (see below) of leading scholarly journals to analyse in detail authorship, acknowledgement and editorial patterns and practices over time. A specific aim was to explore the hypotheses that these journals, established with an explicit agenda, would: (i) privilege female over male contributors; (ii) favour female over male editorial board members; (iii) include a preponderance of acknowledgements to women; (iv) exhibit affect in their acknowledgements, and (v) manifest a 'different voice' [12] in their editorial statements.

For inclusion, a journal had to meet the following three criteria: (i) longevity; (ii) impact; (iii) centrality. We defined the first as being in existence for at least twenty years (1975-1994). The second criterion was operationalised in terms of the Institute for Scientific Information's (ISI) journal impact factors, derived from the *Journal Citation Reports* (*JCR*). We defined centrality in terms of inclusion in *Ulrich's* [3] list of women's studies periodicals and also belonging to the set of core journals identified by Mack [13] in her citation analysis of the literature. Three journals met the selection criteria: *Feminist Studies, Signs: Journal of Women in Culture and Society* and *Frontiers: A Journal of Women's Studies.* All three were ranked in the top ten women's studies journals based on their impact factors for the years 1992 and 1993, *Signs* being ranked first in both years. Both *Signs* and *Frontiers* were founded in 1975, while *Feminist Studies* was established in 1972. Their respective circulation figures are 6,100, 1,000 and 8,000 [3].

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In each case, we gathered data on publication and acknowledgement trends over the twenty year period. First, the number and gender of authors/co-authors of all articles were logged. In the case of ambiguous names we used contextual clues (e.g. an author might be acknowledged in gender-specific fashion in another article). Lacking other evidence, names such as 'Toni' or 'Barrie' were treated as ambiguous. We calculated the number of sole and multiple author papers, and the gender mix. We did not include poems, book reviews, or letters in the inventory, as, in contrast to McDermott's rich ethnographic study [8], we chose to focus on texts which were common to women's studies and other academic disciplines (i.e. scholarly articles).

Second, we identified all individuals who were named in acknowledgement statements, but only counted acknowledgements which bore witness to peer interactive communication (PIC), an approach which has been used in a number of earlier studies of acknowledgement behaviour in the life sciences [14] and also in the humanities and social sciences [15]. The following is an example of a composite acknowledgement statement which explicitly mentions several individuals (names erased) whose intellectual contributions have influenced the author's thinking: 'Many thanks to ... for his provocative introduction to the field of cultural studies - this article began in his seminar at the University of Illinois. I am also grateful to ... for their challenging comments on earlier versions of this article. Special thanks to ... for her generous and incisive critiques of this article'. All the names mentioned herein would have been included in our ledger of what Heffner [16, p. 6] has called 'theoretical subauthorship collaboration'. We did not, however, count acknowledgements for sabbatical leave, financial support or bibliographic assistance: we were interested solely in evidence of conceptual shaping. We determined the frequency and intensity with which authors acknowledged their peers - the proportion of articles which contained PIC acknowledgements, the average number of individuals cited per acknowledgement, and the gender breakdown for each of the three journals over time.

Third, we content analysed all editorials (an approach used by Morris [17]) to identify the broad normative (conformance with prevailing scholarly publication criteria) and moral (the feminist platform) bases for content solicitation, appraisal and selection within women's studies.

THE SAMPLE

The three journals we analysed were, coincidentally, the focus of McDermott's [8] study of feminist journals and knowledge production in academe. McDermott defined feminist academic journals as follows:

They are university-based in terms of housing and financial support and operate under the acknowledged auspices of an accredited university. They state an intended feminist perspective in either their preface, editorial statement, or content. They use academics as editors and consultants. They adhere to conventional forms and styles of academic publishing as defined

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in such manuals as the Modern Language Association Style Sheet and the *Chicago manual of style*. They are bound and typeset in accordance with recognized journal appearance. They are abstracted, indexed ... Finally, they are consistently published at regular intervals.

For the record, McDermott's selection criteria were: (i) interdisciplinarity; (ii) stability, and (iii) managerial diversity. The reader is encouraged to consult McDermott's *Politics and scholarship* for a finely textured account of the evolution, person-ality and ideology of the three journals featured in the present study. Brief biographies of the journals are, however, presented below.

Frontiers, launched in 1975, was associated with the women's studies programme at the University of Colorado, although not everyone on staff was university-affiliated. Of the three journals, *Frontiers* is the smallest, and least secure financially [8, p. 17]. Fourteen volumes were published between 1975 and 1994. Frontiers published an average of eighteen articles per volume with a minimum of three (Volume 13) and a maximum of thirty (Volume 7). One of the editorial collective's main (stated) goals was to bridge the academic/community gap, although it proved difficult to elicit submissions from beyond the professoriate.

Generally, issues were produced around a particular theme, called 'clusters' (such as Women and Work, Oral History, and the Politics of Reproduction), reflecting topics of current interest in the wider feminist/women's studies community.

The publishing history of *Frontiers* includes considerable upheaval and change. The 'Letter to Our Readers' opening each issue often includes information about editorial and organisational processes. There is a more personal accountability and reporting through which one can sense the impact of the collective process and structure. Volume 7 Number 1 adds a statement indicating that decisions about publication are based on interest to a general readership, clarity, and academic soundness (where applicable). At this time there was also a move to relying on an editorial board as well as the editorial collective.

Beginning with Volume 12, the journal moved from Colorado to New Mexico and featured new cover art as well as a new statement of purpose. The gap which needs to be bridged is no longer explicitly between academic and community feminists, but between the most important areas of women's studies – history, theory, criticism and contemporary social issues. Other major changes included a statement on diversity, an emphasis on women in the west, and an acknowledgment that works by women of colour were essential. There was also renewed emphasis on including creative works.

Feminist Studies was founded in 1972, although regular publication did not begin until 1975. Nineteen volumes were published between 1975 and 1994. The average number of articles per volume was twenty, ranging from a minimum of nine (Volume 2) to a maximum of twenty-eight (Volume 3). Feminist Studies was founded for the purpose of encouraging analytic responses to feminist issues. As with Frontiers, the editors of Feminist Studies also tried to address the concerns of both academic and community-based feminists. After struggling

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to find stable funding, by Volume 8 the journal had built closer ties with the academic community and established itself at the University of Maryland. Also at this time, the editors attempted to broaden the journal's appeal by including creative works. A number of issues were themed, though not as consistently as in *Frontiers*.

Signs, established in 1975, is the largest and most closely aligned with traditional academic publishing practices. Twenty volumes were published between 1975 and 1994. The average number of articles per volume was thirty-four, ranging from a minimum of fourteen (Volume 20) to a maximum of fifty-seven (Volume 3). During these two decades, there were three major changes in editorial staff – in 1981 (Volume 6, Number 3), 1986 (Volume 11, Number 3), and 1991 (Volume 16, Number 3). The journal had planned from the start to rotate editorial staff and the location of its editorial offices every five years. Although published by the University of Chicago Press, the journal was first housed at Barnard College and Douglass College under Catharine Stimpson, then at Stanford in 1981, before moving to North Carolina in 1986, and latterly to the University of Minnesota in 1991.

Signs was founded with the aim of publishing new scholarship on women in the United States and abroad. The editors sought out original research, contemplative essays or syntheses of the two. Like Frontiers, the editors solicited interdisciplinary work. They also expressed a desire to produce a journal that would be respected inside and outside the field of women's studies. Another aim was to present multiple perspectives on issues: 'A truth may be simple, but truth is never monolithic.' (I(1), p. vi). Signs exhibited a commitment to internationalism, listing 'International Consultants' from the very beginning. It also included special features such as 'Viewpoints', which typically consisted of one to three articles discussing a specific subject from a variety of perspectives. There was also a regular section that reviewed 'The New Scholarship' discipline by discipline. The first issue of each volume covered the social sciences, the second the humanities, the third reviewed the natural sciences, and the final issue covered the professions – law, health, education, etc. (I(1), p. vi).

RESULTS

Authorship

We identified a total of 1,504 authors associated with all articles (n=1,302) published in the three journals from 1975 to 1994: *Feminist Studies* had 377, *Frontiers* 251 and *Signs* 674 articles. Single author papers (n=1,163) were the norm – 94% for both *Feminist Studies* and *Frontiers* and 84% for *Signs*. Approximately 93% (1,079) of the authors (of single author papers) were female and 6% (76) were male. In eight cases, the author's gender could not be determined. The female/male author ratios for each journal differed appreciably: for *Feminist Studies* it was approximately 14:1, for *Frontiers* 17:1, and for *Signs* 9:1. The distribution of authors by gender is shown in Table 1.

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Table 1. Distribution of authors by gender

Journal	Male	Female	Unknown	Total
Signs	77	701	26	804
Frontiers	27	383	2	412
Feminist Studies	16	272	0	288
Total	120	1356	28	1504

Acknowledgement

Of the 1,302 articles, 595 (46%) contained an acknowledgement testifying to peer interactive communication. The total number of names cited in those acknowledgement statements was 3,252, giving an average of almost 5.5 names per acknowledgement. 66% of the acknowledgements were to females and 20% to males: the remainder were either to anonymous individuals (e.g. referees) or to individuals whose gender was unknown (see Table 2 for the overall distribution of name-linked acknowledgements). The vast majority of individuals were mentioned just once. Only thirty-five (of whom thirty-four were female) were acknowledged five times or more (see Table 3). The most frequently acknowledged individual (Rayna Rapp) received twenty mentions.

Of the 377 articles analysed in *Feminist Studies*, 199 (53%) contained a PIC-bearing acknowledgement. The proportion for *Signs* was similar – 50%. In both cases, the mean number of individuals mentioned per acknowledgement was approximately 5.6. *Frontiers*, however, had a much lower proportion of PIC-bearing acknowledgements – 25%, These, on average, cited four individuals. Females were three to four times as likely to be acknowledged as men. The approximate female/male acknowledgement ratios for *Feminist Studies*, *Frontiers* and *Signs* were 4:1, 3.8:1 and 2.9:1, respectively.

Editorials

Over the twenty year period, the editorial staffs and boards of the three journals underwent many changes, making it virtually impossible to specify the

Table 2. Distribution of PIC acknowledgements by gender

Journal	Male	Female	Unknown	Anonymous	Total
Feminist Studies	207	815	35	84	1141
Frontiers	40	152	12	17	221
Signs	409	1187	85	209	1890
Total	656	2154	132	310	3252

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Table 3. Highly acknowledged individuals

Name	Acknowledgements			
Rapp, Rayna	20			
Petchesky, Rosalind	17			
Stacey, Judy	16			
Young, Marilyn B.	15			
Thorne, Barrie	14			
Walkowitz, Judy	13			
Hartmann, Heidi	12			
Ryan, Mary P.	11			
Freedman, Estelle	10			
Gordon, Linda	10			
Lamphere, Louise	8			
Milman, Ruth	8			
Chodorow, Nancy	7			
Di Leonardo, Micaela	7			
Kaplan, Temma	7			
Kessler-Harris, Alice	7			
Benenson, Harold	6			
Buhle, Mari Jo	6			
Ruddick, Sara	6			
Smith-Rosenberg, Carroll	6			
Strobel, Peg	6			
Tyler, Kate	6			
Barker-Nunn, Jeanne	5			
Ferree, Myra M.	5			
Glenn, Evelyn N.	5			
Haraway, Donna	5			
Harding, Sandra	5			
Keller, Evelyn F.	5			
Lerner, Gerda	5			
Marcus, Jane	5			
Miller, Nancy K.	5			
Offen, Karen	5			
Ross, Ellen	5			
Vicinus, Martha	5			

male/female composition. While men served on the editorial staffs at each of the journals at some level, the numbers were very low and they were not represented at the associate editor level until Signs moved to the University of Minnesota. From an examination of all issues, however, we estimate that the proportion of males with editorial involvement fell within the range 3%-8%,

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with Signs having the largest proportion.

A content analysis of editorial statements in all three journals (n = 135) yielded six principal dimensions, which we labelled: (i) collectivism; (ii) legitimation; (iii) militancy; (iv) sorority; (v) diversity; (vi) pastorality. What we label 'collectivism' is a feature of editorials in the three journals. The term denotes joint decision-making, on all aspects of the selection and production process. Feminist Studies, founded in 1972, left the hands of its solitary originating editor, Anne Calderwood, in 1977. A later editorial ($\theta(1)$, p. iii) recording this change speaks of the 'new life of the journal, as the product of a collective group', and sets an agenda for the 1980s: 'the collective enters the eighties as a group with a conscious set of policies and procedures, all of which will grow and be reshaped in years to come.' The editors of Frontiers (1(1), p. iv) describe themselves as a 'volunteer collective', and those of Signs (8(3), p. 399) speak of 'collective decision-making'. A later editorial in Signs (14, p. 255) restates the collectivist principle as a basic element of the feminist platform: 'For modern feminists, community is a valued concept and an acknowledged goal. In our decision making, we work towards consensus; in our worldview, we strive for inclusiveness, in our social lives we seek group support and comfort. In all these actions, those of us who are Western feminists move against the individualism of our culture'. None of the writers of these editorial comments is under any illusion that the collective process is more efficient. Frontiers editors (1(1), p. iv) are explicit on this issue: 'We are all volunteers and a volunteer collective is not necessarily the most efficient means of publishing a journal. Shared work is harder and it takes more time ... We remain committed to the idea and practice of collective work; future issues of Frontiers should arrive more regularly and promptly, but we think it is more important that the trains run communally than that they run on time'.

Under the rubric 'legitimation', we have gathered comments on the status of each of the journals pertaining to academic standards. We have borrowed the term from the analysis by Morris [17] of initial editorials in new journals. In our sample, there is a manifest tension between conformity with academic norms and subversion. One editorial in *Feminist Studies* (19(1), p. 463) speaks of 'an ironic countermirroring of the usual academic journal'; an editor of *Frontiers* (4(3), p. iv) suggests that 'revisionist history – helping to define a new field of research and enquiry – is not simple.' Editors at *Signs* visit the legitimation theme regularly, though one does appear to have misgivings (8(1), p. 2): 'There arises the question, however, of whether the duality of *Signs*' position – its claim to acceptance by the academic establishment and its participation in feminism's challenge to it – does not involve the journal in self-contradiction.'

Moving from what may be termed normative to moral issues, we have labelled statements that relate to feminism as a political movement as 'militancy'. Examples range from calls for 'a new and sophisticated round of consciousness-raising among feminists' (*Feminist Studies, 5*(3), p. iii) to statements about the role of publishing in political activity, and the balance of tradition and change as political agendas evolve: 'We cannot expect the young women who come of age in the eighties to fall in step behind our own history or to enroll in our

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courses in search of advice from veterans of past campaigns ... we determine not just to endure through the eighties, but to help construct a feminism of and for the late twentieth century' (*Feminist Studies, 8*(1), p. v). A *Frontiers* (1(1), p. iv) editorial exhorts the community to 'constantly work to encourage and to use the efforts of our sisters in the "realworld"', and a later editorial (5(1), p. iv) describes a mission 'to make new knowledge meaningful and accessible to all of us, and ... to reduce the barriers which prevent our working in concert – heterosexism, racism, agism, classism, elitism.'

The corollary of militancy is what we call 'sorority', a position of 'mutual respect in which feminist scholars hold each others' perspectives and each other's work' (Signs, 8(1), p. 3)). A Whitmanesque editorial in Frontiers (12(1), p. xii) welcomes the participation of an eclectic readership: 'Academics involved in women's studies, feminist scholars, writers and readers of the new women's literature, native and immigrant women, lesbians, mothers, grandmothers, young women just waking to our collective strengths, women who are differently abled, African-americans, Hispanics, Native Americans, and Asian-americans all the diverse members of our diverse communities: Frontiers Editorial Collective hopes you will continue to claim this journal as your own.' This mutualist 'feminist spirit' informs the reviewing process at *Frontiers* (2(2), p. iv, v): 'Some of our authors remarked that our editing process was not only painless but also quite helpful ... that heartened us, because since we began publishing in 1975, we have been consistently committed to working collectively and to treating our authors with warmth and respect'. However, 'mutual respect' is not always easy to sustain: 'We ask how we are to struggle while remaining sisterly', as an editorial in Feminist Studies (6(1), p. v) puts it.

An explicit commitment to diversity is a hallmark of the three journals. Feminist Studies (8(1), p. iv) editors describe their agenda as being to 'open up our board and the pages of the journal to Third World women, lesbians, and women younger and older than ourselves.' Frontiers (5(3), p. iv) describes itself as offering a 'potpourri', with 'an open and fluid Editorial Board, committed to feminism ... in a wide range of manifestations'. Signs editors (1(4), p. vi), who prefer the term 'interdisciplinarity', agonise over the difficulties of achieving this: 'we must also strive to change the less painful, but pervasive resistance we have encountered to the interdisciplinarity, a methodological principle at work in women's studies from the start'.

In our coding system, the term 'pastorality' denotes articulation of the 'ethics of care' [12] by means of affective narrative in editorials. An illustration is the valediction to three retiring board members in *Feminist Studies* (11(2), p. 3): 'We salute their tireless and creative efforts. With their help, *Feminist Studies* has become a major forum for the development of women's history, and feminist theory in this country. We're proud and deeply grateful for what they have helped us to accomplish. We will miss them'. *Frontiers* editors (5(3), p. iv) describe the efforts of the collective as a 'labor of love' and themselves as a 'large family of women' who have 'sustained the journal, nurtured it, and cared about it with unusual dedication, skill and hard, unpaid work.' *Signs* editors (5(4), p. 571) speak of the 'energy and faith' of their editorial associates, and

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their 'exhilarating and demanding' job, and they describe in eloquent terms their mission to offer outsiders a space to be heard (1(4), p. vi): 'When we began, we knew that some portions of the academic and intellectual world looked at the new scholarship about women with suspicion, indifference, or contempt. It is particularly hard to see the effect of such attitudes on our more vulnerable contributors: graduate students, the unemployed, the nontenured. Their contributions to the progress of the new scholarship must be acknowledged while we work against the unseasoned and unreasonable biases that have caused their difficulties'.

DISCUSSION

Authorship patterns

In recent decades the incidence of multiple authorship across virtually all disciplines has increased significantly [18]. According to the Institute for Scientific Information [19], the average number of authors per source item in the Science Citation Index increased from 1.84 in 1966 to 3.67 in 1995, while the comparable figures for the Social Sciences Citation Index were 1.15 and 1.74 [20]. Women's studies would appear to be a notable exception to this trend. On average, 90% of the scholarly articles published in Feminist Studies, Frontiers, and Signs are sole authored. No less striking is the consistency of the practice across the three journals: the percentage of single author papers was 94%, 90%, and 86%, respectively. To some extent this may be a function of the often speculative and philosophical nature of the content: articles in the journals we analysed were not, typically, experimental or empirical in nature, and thus would be less likely to require the kinds of collaboration which have become the norm in many other fields, most notably Big Science. It may also be a conse-quence of early ghettoisation and the weak institutionalisation of the field within higher education.

Sub-authorship collaboration

Evidence of sub-authorship collaboration, on the other hand, is robust. 50% or more of the articles in *Feminist Studies* and also *Signs* included PIC-bearing acknowledgements, though the figure for *Frontiers* was significantly lower – 25%. It is instructive to compare these figures with the available data for philosophy, history, psychology and sociology. An analysis of leading journals in these four disciplines showed that 21%, 50%, 67%, and 79%, respectively, of articles carried PIC-bearing acknowledgements [15, p. 35]. The same study [p. 37] found that the typical PIC in each of these four disciplines mentioned 3.2, 4.8, 5.2, and 5.3 individuals, respectively. The equivalent figure for women's studies was higher – in the 5.6–5.7 range. Within women's studies, it may be that sub-authorship assistance/collaboration is related to the lack of co-authorship and/or the belief that credit and rewards have been systematically withheld from women [21, p. 6]. It may also be that the emphasis on caring,

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mutualism and mentoring within women's studies translates into above average intensity of acknowledgement.

The frequency distribution of acknowledgements (see Figure 1) within this sub-set of the women's studies literature conforms to the general bibliometric model – high concentration and a long tail [22]. This pattern has been exhibited in a variety of disciplines, namely, information science, philosophy, sociology, history, psy-chology, astronomy [6]. Eleven individuals (all female) were explicitly acknowl-edged ten times or more; thirty-five (including one male) were mentioned five times or more. This high acknowledgement population includes many of the intellectual leaders of the women's studies movement in North America and members of editorial boards/collectives (e.g. Haraway, Ruddick, Stimpson).

Gender differences

The preponderance of females among the author population is striking: more than 90% of all single author papers were penned by females. The field is manifestly gendered, an ironic reversal of the criticism often made by feminist scholars of traditionally male-dominated disciplines such as chemistry, computer science and economics. In the case of *Frontiers*, only 3% of the articles were

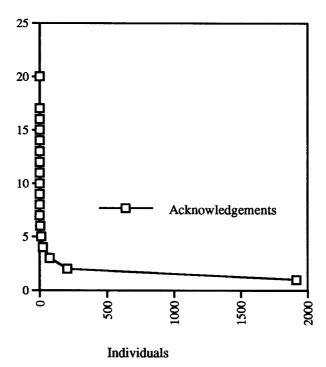


Figure 1. Frequency distribution of acknowledgements to named individuals in all three journals

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written by men, though it is hardly surprising that female authors would dominate the literature of women's studies, especially during its formative years, given the highly constructed nature of the field. In addition, it is conceivable that potential male authors are either uninterested or disinclined to submit to a field so tightly coupled in some people's minds with a 'politicized form of education' [23, p. 30]. Third, the gatekeepers of this new literature (the editors, boards, collectives and consultants who manage the journals) are overwhelmingly female, and may be less predisposed to consider manuscripts from male colleagues. In their study of sociology, a discipline which clearly has more in common with women's studies than, say, astrophysics or molecular biology, Davenport and Snyder [24, p. 407] found that 28% of the scholarly articles in their sample had women as first authors. Even allowing for some degree of female underrepresentation in the published literature of sociology, the contrast with women's studies is striking.

A stronger male presence is discernible in the acknowledgement statements. Overall, 23% of the classifiable acknowledgements were to male colleagues, with *Signs* having the highest proportion, 26%. *Feminist Studies* had 20% and *Frontiers* 21%. The male/female ratio is less extreme with acknowledgement than with authorship, which may be suggestive of latent interest in, or sympathy for, women's studies among some male members of the professoriate. In general, the data support Moore's [25, p. 1029] findings that there 'is a tendency on the part of each sex to seek out and acknowledge the professional advice of same sex colleagues'.

Affective acknowledgement

Overall, the affect level was low. Most acknowledgements, whether free-standing or buried in the footnotes, were written in matter-of-fact style, with only occasional instances of effusiveness or floridity. A couple of examples from *Signs* and *Frontiers* may help illustrate: 'Evolving as it did in an environment that places value on the joys and benefits of collaborative research, there are colleagues and friends too numerous to mention whose ideas and efforts have contributed heavily to this paper. I would like to thank each, and to especially acknowledge ... for intellectual, human, and editorial support in its preparation from first draft to final manuscript'; 'I am indebted to the authors cited in this article, including the ones whose work I have questioned. Changing interpretations are healthy in a developing field, and everyone's work has been important in enabling us to raise new questions. I am grateful to ... for their useful comments, and to ... in particular for ongoing conversations that stimulated my questions and interpretations'.

An earlier analysis of almost 6,000 acknowledgement statements in four humanities and social sciences disciplines found that 'the structure, style and syntax of acknowledgements seemed scarcely to vary at all ... [t]here was little ornament and minimal intrusion of the subjective' [15, p. 40]. Our hypothesis (see iv in the 'Aims and Methods' section) that acknowledgements in women's

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studies journals would exhibit greater affect than those in other fields is only very weakly supported by the evidence. This may be due to editorial scruples that the conventions of academic presentation be adhered to, even excessively, in the interests of scholarly credibility. McDermott [8, p. 99], in fact, commented upon the three journals' meticulous attention to accepted form. In the case of editorials, however, our hypothesis (see v) about 'a different voice' proved to be robust.

Editorial voices

The six dimensions which we identified in the 'Results' section may be interpreted in terms of a feminist agenda for epistemological and political change. Our categories of 'collectivism', 'diversity' and 'pastorality' are features of a feminist episteme which undergoes continuous reflexive examination in the editorials of these three journals. The editors of Feminist Studies note that feminists are engaged in examining the 'paradoxical relation between our strengths and weaknesses as a movement' (7(2), p. 183). The editors of Frontiers (13(2), p. ix) recognised a recurrent need to 'examine and reexamine our feminist literary texts'. The editors of Signs (11(3), p. 435) saw it as the need to 'reexamine the complexities of your own theoretical assumptions'. There was a continued emphasis on publishing articles which 'correct the errors' of traditional knowledge across disciplines. For example, in the preface to Feminist Studies (6(3), p. 426) the editors included articles which exposed the 'ideological content of scientific literature' and other work which, while 'seriously flawed method-ologically, has been overinterpreted and used to undermine women's efforts'. The editors of Signs (3(1), p. vii) concur that 'scholarship must still expose and correct dangerous intellectual errors about women', and again that women's studies provides a necessary 'corrective to the distortions that result when data, theory, and methodologies homogenize the diversity of women's lives' (11(3), p. 436). As well as commentary on the biases of traditional scholarship, there is continuing discussion of the need to correct bias within their own field of women's studies.

Our categories of 'militancy' and 'sorority' reflect a feminist political agenda. Many of the editorials are calls to activism, and articulate a desire that feminist scholarship will continue to contribute to active involvement in efforts beyond the academy. As we indicate above, the comments which we subsume under 'legitimation' manifest a tension between the feminist agenda and the norms of scholarly enquiry.

In terms of Merton's [26] norms (the pillars of the institution, traditional science, which the editors of these journals seek to undermine) the editorials demonstrate disinterestedness: the setting of personal agendas is not a feature, as distinct from the setting of the collective agenda, the promotion of the feminist episteme, and communalism. They also conform with the norm of communism ('findings ... are a product of social collaboration and are assigned to the community' [26, p. 273]). However, they diverge in the norms of

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universalism and organised scepticism ('temporary suspension of judgement and the detached scrutiny of beliefs in terms of empirical and logical criteria' [26, p. 277]), in their experientalism, their emotionality and their eclecticism – the last is not, however, indiscriminate: *Signs*, according to the Spring 1988 issue, rejects 40% of the manuscripts which it sends to external readers (52% of all those it receives for consideration).

CONCLUSIONS

Our bibliometric analysis of contributions to three leading women's studies journals over twenty years revealed several notable patterns: a high level of sole authorship; a preponderance of female over male authors, and intensive acknowledgement with a higher number of credits accruing to women than men. A content analysis of editorials in the same sample revealed an affirmative action agenda to give more women a voice in publications which conform to academic production protocols. This overt agenda may explain the patterns described above. It is, however, premised on incompatible objectives, the advancement of women in an institution, academe, which these same women seek to subvert. A symptom of this ambivalence is the adherence to the formalisms of scholarly publication, coupled with an emotional register which deviates from the norms of scholarly expression.

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