Bibliometric Study of Early Modern History in Spain Based on Bibliographic References in National Scientific Journals and Conference Proceedings¹

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Abstract

This study evaluates the historians' work, with a selection of 1,282 source papers published on early Modern History in Spain during 2000 and 2001 (417 articles published in 15 journals, and 865 conference papers included in 14 different proceedings, see references). They contained 44,471 bibliographic references citations (with a repetition factor of 1.59) plus 19,269 references to archive documents or manuscripts. Some conclusions are obtained in a first approach: Although conference proceedings accounted for a larger number of papers (2/3 of total) than journals (1/3), coming from a similar number of chosen proceedings and journals(14 - 15), the proceedings were not cited more frequently (5.54%) than journal articles (18.53%). Historians work usually alone, their cites are 61.5% monographs, and historical materials reached 15.59% of all citations. The vernacular languages, Spanish and Catalonian, together represented 72.50% of the citations, followed by French; other languages were more indicative of the subjects studied. The average age of the citations was fairly high, with the 50th percentile being around 16-17 years. Although a core of 111 journals was identified, dispersal was very wide, for the 7,805 articles cited appeared in 2,132 periodicals, 1,301 of which published only one of the cited articles.

Keywords

Citation analysis in the Humanities; early Modern History; Citation analysis in Conference proceedings; Spain

1. Introduction

Humanities scholars' tendency to publish their papers primarily as monographs and in national journals, many without listings in ISI databases, constitutes an obstacle to the application of quantitative bibliometric indices (Sanz Casado and Martín Moreno, 1997; Sanz Casado et al., 1999, Moed, 2005:147-153; Coffey, 2006; Nederhof and Noyons, 2006). In late 2003 a proposal to study early modern Spanish history citations begun with journals published in 2000 and 2001(with some exceptions of 1999, and delayed or biannual issues of periodicals) as source materials and, as a novelty, the proceedings of the most prominent international conferences published in the same two years. In addition to attempting to characterise historians' activity, the citation index obtained would

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afford researchers an indication of their visibility and provide an objective tool with which to evaluate scientific production.

2. Methodology

The citations were extracted from 417 articles published in 15 journals, and 865 conference papers included in 14 different proceedings. Computer software was used to extract the citations, most in footnotes, from text files (converted from "PDF" formats or created byprinted text digitisation and OCR). This software, developed entirely by Dr Fernández Izquierdo, consists in a series of highly effective PerfectScript scripts. Due to the heterogeneity of the output, standardisation, synthesis and clean-up protocols were applied to the data. The papers were classified later by two taxonomic criteria: language and document type.

In this regard, *ModernitasCitas*, the CSIC (Spanish National Research Council) Institute of History's open Internet portal for queries, comments and suggestions that runs on Windows Server with Filemaker Pro software, has been available on the Web since September 2004 http://www.modernal.ih.csic.es/emc/

3. Results and discussion

3.1 Overview of the citing articles (source of citations)

Of the 15 conferences and 15 journals chosen, only 13, all proceedings, furnished over 40 articles each, together accounting for 71.61% of the total.

The 1,282 papers analysed were signed by 1,003 authors, indicative of a relatively low degree of multi-authorship: only 1.08 in the period analysed. Spanish authors were observed to follow patterns similar to those described by different authors in the past (Stone, 1982; WIBERLEY and JONES, 1994; Sanz et al., 2002): as Brockman et al. (2001) observed, they work jointly on research projects, but publish their papers individually.

Author sporadicity was high, with 762 authors publishing only one paper; 160 publishing two; 48 three; 20 four; 8 five; 3 six; one eight and one nine. Due to the specialisation in early modern history, the sporadicity rate in the sample analyzed was 55.26%, lower than the 75% found by Sanz et al. (2002) for the humanities in general, but higher than the 36% average reported by other authors (Schubert and Glänzel, 1991).

3.2 Bibliographic references(citations)

The 1,282 source papers contained 44,471 bibliographic references, net of the repeated references to a given article in the same citing paper initially counted by the extraction software: the mean repetition factor was 1.59 (see Table 1). An additional 19,269 citations were references to archive documents or manuscripts, i.e., 30.22% of the sum of the archive documents and published papers, a figure much higher than the 12.6% reported by Jones, Chapman and Woods (1972). No rigorous analysis or evaluation can ignore such a large volume of citations.

Monographs are the type of paper most frequently cited, followed at some distance by journal articles, for which figures similar to the findings reported by Sanz et al. (2002) in their study of Spanish history journals. These data concurred with the results of other studies with respect to the observation that humanities researchers prefer books to journals (Brockman et al., 2001, Knievel and Kellsey, 2005). Indeed, while they publish different types of papers, monographs clearly predominate, a tendency observed since the nineteen seventies (Bebout et al., 1975; Stone, 1982; Broadus, 1987). Given the focus on historians, the present study identified a specific category comprising monographs prior to 1830 and current editions of period studies, as well as other older sources (journals, press, legislation), which together accounted for 15.59% of the citations.

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Type of document percentile subtype freq. % freq.hcs. % freq. % 27.349 61,50 monographs 61,50 contemp. monogs 20.717 46,59 articles 8.286 18,63 80,13 hist. monographs 4.078 9,17 collective papers 12,31 5.476 92,44 hist.books proceedings 2.464 5,54 97,98 editions 2.554 5,74 theses 321 0,72 98,70 articles 8.255 18,56 websites 168 0,38 99,08 historic articles 31 0,07 99,57 217 0,49 press legislation 177 0,40 99,97 press 121 0,27 7 cartography 0,02 99,98 historic press 96 0,22 magnetic media 6 0,01 100,00 Total (a) 44.471 100,00 legislation 1 0,00 Repeated citations(b) 70.816 historic Repetition factor (b/a) 1,59 legislation 49 0,11

modern./edited

127

6.935

29.094 65,00

0,29

15,59

vers.

Table 1.- Type of document cited and disaggregation of historical materials

Citations in Spanish, the vernacular language, predominated, followed by French, a language with a long historiographic tradition in Spain (Table 2); these results are in line with other recent observations in this regard (Fernández Izquierdo and Moreno Díaz del Campo, 2006 recorded 73% in Spanish and 15% in French; Knievel and Kellsey (2005) found 80.5% of the citations in US history journals to be in English. Citations written in other languages were associated with the subjects studied or the nature of the authors, but very far of 91% of English citations by Turkish authors in A&HCI (Al, U.; Şahiner, M.; Tonta, Y. 2006). References to period papers in Latin confirmed a practice characteristic of the humanities (Knievel and Kellsey, 2005).

References to archive

19.269

material

Table 2.- Distribution of works cited by language

Language	freq.	%	percentile	Language	freq.	%	percentile
Spanish	30,139	67.77	67.77	Galician	62	0.14	99.83
French	3,396	7.64	75.41	Hungarian	45	0.10	99.93
English	2,926	6.58	81.99	Polish	8	0.02	99.95
Italian	2,486	5.59	87.58	Scandinavian langs	10	0.02	99.97
Catalonian	2,102	4.73	92.31	Turkish	5	0.01	99.98
Latin	1,293	2.91	95.21	Russian	3	0.01	99.99
German	1,226	2.76	97.97	Hebrew	3	0.01	100.00
Dutch	462	1.04	99.01	Asturian	1	0.00	100.00
Portuguese	303	0.68	99.69	Basque	1	0.00	100.00
				Total	44.471	100.00	

Although the publication dates of the materials cited (undated citations were disregarded) ranged across many centuries (a fact also observed by Tosete Herranz, 2002), two thirds of the references were less than 30 years old and the 50^{th} percentile was around 1984. The average age of the papers when the citing paper was published – 16.98 years – is indicative of the intensity of research in recent decades.

Table 3.- Works cited by year of publication

Year pub.	freq.	%	percentile
500-1199	6	0.01	100.00
1200-99	1	0.00	99.99
1300-99	1	0.00	99.98
1400-99	70	0.16	99.98
1500-99	1206	2.82	99.82
1600-99	1045	2.44	97.00
1700-99	1319	3.09	94.55
1800-49	631	1.48	91.47
1850-99	1852	4.33	89.99
1900-09	476	1.11	85.66
1910-19	518	1.21	84.54
1920-29	498	1.17	83.33
1930-39	564	1.32	82.17
1940-49	991	2.32	80.85
1950-59	1723	4.03	78.53
1960-69	2576	6.03	74.50
1970-79	4736	11.08	68.47
1980-89	9401	21.99	57.39
1990-99	14408	33.71	35.40
2000	655	1.53	1.69
2001	52	0.12	0.16
2002	10	0.02	0.04
2003	5	0.01	0.01
Total	42744	100.00)

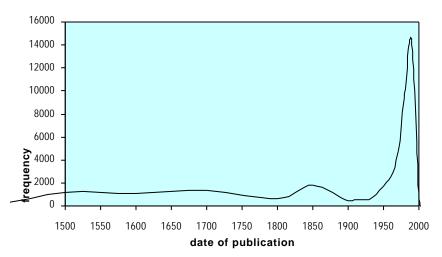


Figure 1.- Distribution of citations by year of publication

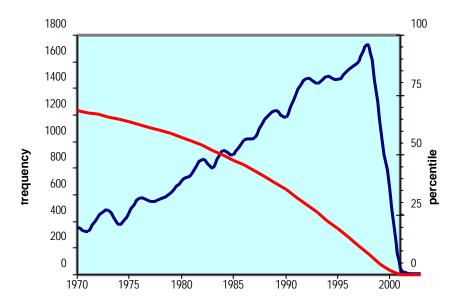


Figure 2.- Citations: distribution and percentiles by year of publication (1970-2001)

A total of 15,892 different authors were cited in the 44,471 references; one had 230 citations; another 209; nine were cited at least 100 times; 2,435 were cited twice; and 10,219 only once. Moreover, 4,706 authors, or 10.76% of the total, were cited at least 50 times.

Another index explored was the dispersal of the journals most consulted frequently by these researchers. The 7,805 articles cited were published in 2,132 journals, 1,301 of which published only one of the papers cited. The core consisted in 111 journals which together accounted for nearly 50% of the references (Figure 3).

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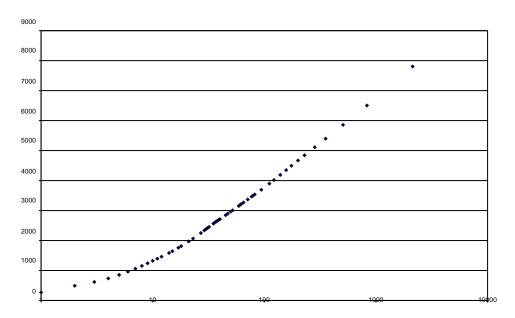


Figure 3.- Dispersal of journals consulted.

4. Conclusions

- Although conference proceedings accounted for a larger number of papers than journals in a given period (a similar number of proceedings and journals was chosen: 14 15), the proceedings were not cited more frequently (5.54%) than journal articles (18.53%).
- Historians are prone to work alone, judging from the low rate of multi-authorship observed.
- Over 61.5% of the papers cited were monographs (monographs plus edited versions).
- Historical materials accounted for 15.59% of all citations, and the repetition factor found was 1.59.
- Not only printed paper: archive material and other sources would also need to be studied in citation analysis of History works.
- The vernacular languages, Spanish and Catalonian, together represented 72.50% of the citations, followed by French; other languages were more indicative of the subjects studied than of any effective internationalisation.
- The average age of the citations was fairly high, with the 50th percentile being around 16-17 years.
- Although a core of 111 journals was identified, dispersal was very wide, for the 7,805 articles cited appeared in 2,132 periodicals, 1,301 of which published only one of the articles cited. An analysis discriminating between Spanish and foreign journals should be expected to lead to results along the same lines as reported here with respect to the language of citations; another area that would need to be explored is the differences between citations from articles on the one hand and conference proceedings on the other.

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