textos universitaris de biblioteconomia i documentació

ISSN 1575-5886 DL B-19.675-1998 número **27** desembre de 2011

Facultat de Biblioteconomia i Documentació Universitat de Barcelona

nici • presentació • instruccions autors • subscripció • altres números • cerca • blo

Use of the A&HCI to evaluate research in minority language literatures: the case of Catalan and Danish literature

[Versió catalana] [Versión castellana]

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Abstract [Resum] [Resumen]

Purpose. The tools for measuring the research impact are of little use in disciplines such as history and literature, which have a strong cultural, linguistic and regional component and often use channels of academic communication in languages other than English. The aim of this article is to provide a methodological contribution to the use of WoS data bases showing that it is nevertheless possible to obtain quantitative information on these disciplines through the A&HCI if a suitable strategy is used. We also wish to stress the need to improve the coverage of citation databases in humanities and the information retrieval tools that they include. The cases of Catalan and Danish literature are used as examples.

Methodology. To carry out this research we have created a protocol that could be employed as a general way for the study of any other literature from citations databases. This method consists of complementing the search for subject categories of Catalan and Danish literature as topics in the A&HCI with a list of outstanding authors in each of the two languages.

Findings. We identify international trends in Catalan and Danish literature research. We also determine the international visibility of the studies in comparison with those of other literatures. Research into literature in Catalan and Danish literature does not seem to be gaining ground internationally. The results are in agreement with those of previous studies, which proves the efficacy of the proposed method.

1 Introduction

The application of accountability measures to the research carried out at universities initially affected mainly science and technology, but lecturers in disciplines such as history and literature are now also being asked to accredit the impact of their work. As these disciplines often have a strong cultural, linguistic and regional component, and use channels of scientific communication that are highly limited by the local language, their impact is hard to measure. Though the number of researchers working in these disciplines on a global level is far from small, they are not indexed by the available citation databases. This fact makes their research evaluation difficult. One such discipline is that of literature written in minority languages, which is often a major field of study in university departments that study language and literature. This is the case of Catalan and Danish literature, though the situation must affect all the literatures and languages that do not have the international impact of English, such as Spanish, French and German.

By Catalan literature we understand that which is written in Catalan. That is, we are not referring to

literature carried out in Catalonia, but exclusively to the research performed within the subject of literature written in Catalan, regardless of where it is written. By Danish literature we also understand that which is written in Danish. Therefore, literary studies made about authors like Saxo Grammaticus o Tycho Brahe are not included, since their productions was not written in Danish.

Though both countries have a strong literary tradition despite a relatively small number of speakers, the historical evolution of literature in the two countries is very different. Whereas the literature in Danish developed during the Reformation in the 16th and 17th centuries, the period of splendor of Catalan literature was in the late Middle Ages, after which it waned due to the social and political influence of Spanish and French. During the 19th century the nationalist movements and Romanticism gave new drive to literature in both countries, as happened all over Europe. However, the recovery of Catalan literature was truncated in the 20th century by the arrival to power of the Franco regime.

Just as the major European states promote their culture and official languages through institutions such as the British Council, the Institut Français, the Instituto Cervantes and the Goethe Institut, so do the Danish government and the authorities of the Catalan-speaking countries through the Danske Kulturinstitut and the Institut Ramon Llull, respectively. The commercial impact of these policies can be measured using indicators such as the number of translations and editions of classics. In the academic world, however, the tools for measuring impact fail to take into account literatures written in minority languages.

The most common tools for measuring academic impact are bibliometric ones, and in particular citation analysis. For this study we have used the Arts and Humanities Citation Index (A&HCI). This well-known product of Thomson Scientific has been operating since 1977 (Keller; Lawrence, 1980) and in 2005 it was incorporated in the WoS.

Several studies have indicated the shortcomings of the WoS in fields with a significant production in languages other than English, and in fields in which monographs are important, such as some disciplines of the social sciences and humanities (Hicks, 2004; Moed, 2005; Nederhof, 2006). Nederhof and Zwaan (1991) calculated that the Social Science Citation Index (SSCI) and the A&HCI, both included in the WoS, covered 45-60 % of Dutch publications on subjects of general interest published in English, but only 20 % on subjects of a regional nature, normally written in Dutch. For the above reasons, little citation analysis has been performed in the humanities in comparison with other areas of knowledge (Ardanuy, 2009).

T. Luukkonen (1991) —cited in (Karlsson, 1994)— found that scientists publishing from small, non-English-speaking countries encounter many added obstacles to becoming international references. Furthermore, Katz (1999) showed that the impact of the publications of a given country grows with the increase in the size of its global production. Therefore, countries with a small population and a small production find it more difficult to achieve visibility.

All these lacks and difficulties have conduced to the creation of tools that list magazines which are not indexed in the WoS —and more recently in the Scopus database— such are Carhus, MIAR or IN-RECS, but they just limit themselves to assess the visibility of the publications and, sometimes, their impact or those of the authors, they do not hold additional bibliographic information or the references employed in every work.

Moreover, the WoS is systematically ruled out as a means of evaluating literary studies and research quality in this discipline. However, the presence of literature in the WoS databases, however small, can help to demonstrate whether the literature and literary scholarship written in a minority language are closed in on themselves. The use of the WoS can also help to evaluate internationalization policies as a complement to counting translations of literary works into other languages. The case study we present herein should serve as a basis for furthering the use of bibliometric tools in literary studies, and for adapting the methods of use of the A&HCI to evaluate research into and dissemination of literature. Our aim is to identify the useful information that can be obtained from the A&HCI in order to further knowledge of research on literatures in languages spoken by small populations on a global scale.

2 Methodology

Our study was based on records obtained from the A&HCI. Previous bibliometric studies reported that no publications specialized in Catalan language and literature, mainly written in Catalan, were

indexed in the A&HCI (Ardanuy, 2008; Ardanuy; Quintana; Urbano 2008). That is, none of the basic journals of the discipline are indexed in the WoS. We found no previous bibliometric studies dealing with Danish literature (Ardanuy, 2009).

Some research in Catalan or Danish literature may discard this database because they probably presume that they will not be able to gain profit from it. Here is proposed a research protocol that could be generally used and could afford to obtain a substantial number of references.

The records were obtained from the WoS with an Advanced Search using the search equation: Topic (search topic terms within the fields Title, Abstract, Author and Keywords), Title, Author, Group Author, Publication Name, Year Published, Address, Language and Document Type. In addition to the logical operators (AND, OR, NOT and SAME) and wildcards (*, \$, ?), the search can also be limited by years. The results can be refined by non-disjoint topics. We found the following ones that are relevant to literature:

- LITERATURE
- LITERATURE, ROMANCE
- LITERARY REVIEWS
- LITERARY THEORY & CRITICISM
- LITERATURE, AFRICAN, AUSTRALIAN, CANADIAN
- LITERATURE, AMERICAN
- · LITERATURE, BRITISH ISLES
- LITERATURE, GERMAN, DUTCH, SCANDINAVIAN
- LITERATURE, SLAVIC
- POETRY
- THEATER

However, literature records are also contained in areas such as: CLASSICS, MEDIEVAL & RENAISSANCE STUDIES, HUMANITIES, MULTIDISCIPLINARY, FOLKLORE and WOMEN'S STUDIES.

To obtain the records on Catalan literature, we used a dual strategy. Firstly, we used the search topics "Catalan Literature" and "Catalan AND Literature". Secondly, we made a parallel search using a list of outstanding authors of Catalan literature as the topic. The same procedure was followed for Danish literature.

It is obvious that these two procedures are far from exhaustive but they allow to recover a relative important collection of records with a limited effort. For example, a list of literary works multiplies enormously the recovery task. Other attempts, like including geographic commonplaces in the heading, (for example Barcelona or Copenhagen), do not virtually add items and, furthermore, they introduce an important quantity of noise that must be filtered (such as Spanish literature or literature in other languages).

Establishing a list of the most important authors is always difficult because of the lack of an indisputable criterion. For merely practical reasons, in the case of Catalan literature we chose the authors who had an entry of more than 100 lines in the *Nou diccionari de la Literatura Catalana* (NDLC) (Bou, 2000), which gave a list of 92 (Ardanuy, 2008). Of these authors, 17.4 % corresponded to mediaeval literature, 1.1 % to modern literature and 81.5 % to contemporary literature.

In the case of Danish literature we chose the authors with their own entry in the *Dictionary of literary biography*, ¹ a publication of international prestige that has dedicated two volumes to the literature of Denmark: Volume 214 (Stecher-Hansen, 1999), which deals with the main authors of the 20th century, and Volume 300 (Stecher-Hansen, 2004), which deals with the authors of the 16th to 19th centuries. After excluding the authors who have not generated literature in Danish, such as the astronomer Tycho Brahe, we obtained a list of 95 literary authors, a number very similar to that of the Catalan authors selected. Of the authors 9.5 % were from the 16th and 17th centuries, 43.2 % from the 18th and 19th centuries and 47.3 % from the 20th century.

For Catalan literature the customary division into mediaeval, modern and contemporary literature historical periods was used (Molas, 2001). For Danish literature the separation into two volumes of the *Dictionary of literary biography* suggest that one period is the 20th century. For reasons of coherency and to facilitate counting, the content of the other volume was divided into two periods: one covering the 16th and 17th centuries and one covering the 18th and 19th centuries.

The chronological coverage of the A&HCl goes from 1975 to the present, but as the rate of

updating varies, at the research moment, we decided to explore the records from 1975 to 2007.

From the records obtained we manually removed the ones that were not relevant. Some problems arose in the process of mining and filtering, in which errors are always possible. One of these was the use of variants for the names of classic authors, such as Ramon Llull (Raymond Llull, Raymond Lully, Raimundus Lulius, etc.). In some cases it was difficult to distinguish works on literary authors with the same surname. It was difficult to separate literary studies from those that analyze only philosophical or theological aspects, as in the case of Ramon Llull and Søren Kierkegaard. Finally, we had to filter works by authors writing in more than one language: many Catalan authors also write in Spanish, and Karen Blixen, for example, wrote in both Danish and English.

The records selected from the A&HCI were exported to a reference manager to perform authority control and from here to a database manager for statistical processing.

3 Results and discussion

After removing about 10 % of the records by manual filtering, we were left with 679 records for Catalan literature. Of these, 79 had been obtained directly using one of the above variants of the topic "Catalan Literature".

In the case of Danish literature, after the manual filtering we were left with 778 records, including the universally-known author Hans Christan Andersen and three Nobel laureates: Karl Adolph Gjellerup and Henrik Pontoppidan, joint winners in 1917; and Johannes Vilhelm Jensen, winner in 1944. Of these records, 75 were obtained directly using one of the above variants of the topic "Danish Literature".

An analysis of the type of documents referred to in the records obtained, based on the A&HCI classification, showed that in both literatures two thirds were book reviews and only just over a quarter were articles (table 1). The remainder included notes, biographical items, conference proceedings, meeting abstracts, sundry reviews, theater reviews and editorial material (which covers heterogeneous document items such as interviews and opinions).

	Catalan L	iterature	Danish Li	terature
Document Type	No. of records	% of records	No. of records	% of records
Book review	455	67.0	512	65.8
Article	196	28.9	230	29.6
Editorial material	7	1.0	12	1.5
Item about an individual	7	1.0	-	-
Review	-	-	9	1.2
Biographical item	6	0.9	4	0.5
Note	5	0.7	5	0.6
Theater Review	3	0.4	-	-
Theater Review	-	-	3	0.4
Proceedings paper	-	-	3	0.4

Table 1. Distribution of records according to groups of document types

Figure 1 shows the evolution of the presence of book reviews and articles by year of publication in the Catalan and Danish cases. The data are grouped into 3 periods. Two different trends are observed. In Catalan literature there was a steady increase in the number of articles and a decrease in the number of book reviews in the period 1997-2007. The total number of records showed an increase that was attenuated in the period 1997-2007 by the fall in book reviews. In Danish literature, on the other hand, despite an increase in the number of articles in the period 1986-1996,

the general trend was downward. Therefore, in neither case do they seem to be gaining ground on an international level. Danish literature is perhaps even losing ground in absolute terms, and even more in relative terms considering the increasing amount of literature on arts and humanities in this period.

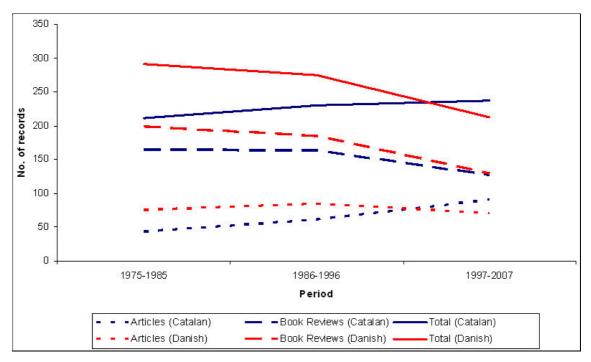


Figure 1. Chronological evolution of document types

In Catalan literature, English is clearly the dominant language, with 54.5 % of the references (table 2) followed by Spanish with 27.2 %, whereas Catalan only appears in 1.8 % of the records. Details was already been exposed in earlier work (Ardanuy; Quintana; Urbano, 2010).

Language	Тс	otal	Article			ook riew	Other		
	No.	%	No.	%	No.	%	No.	%	
English	370	54.5	68	34.7	297	65.3	5	17.9	
Spanish	193	28.4	104	53.1	72	15.8	17	60.7	
French	53	54.5	11	5.6	38	8.4	4	14.3	
German	35	5.2	4	2.0	30	6.6	1	3.6	
Catalan	14	2.1	4	2.0	9	2.0	1	3.6	
Italian	14	2.1	5	2.6	9	2.0	0	0.0	

Table 2. Distribution of languages according to document type (Catalan literature)

In the Danish literature (Table 3) the predominance of English (73.9 %) is even clearer, whereas German shows a secondary but significant presence (14.8 %). However, the figure for German rises to 23.5 % for articles, compared with 53.9 % for English and 16.1 % for French. The presence of Danish is low, and largely due to 3 Kosmorama articles published by the Danske Filminstitut and indexed in the A&HCI. Unlike in Catalan literature (Ardanuy; Quintana; Urbano, 2010), the publications with most of the book reviews and articles are the same ones: *Scandinavian Studies* (in English), *Scandinavica* (mainly in English) and *Skandinavistik* (mainly in German), though a few book reviews from the magazine *World Literature Today* are also indexed.

Language	Тс	otal	Article			ook riew	Other	
	No.	%	No.	%	No.	%	No.	%
English	575	73.9	124	53.9	431	84.2	20	55.6
English	113	14.5	54	23.2	55	10.7	4	11.1
French	58	7.5	37	16.1	12	2.3	9	25.0
Swedish	13	1.7	5	2.2	6	1.2	2	5.6
Italian	10	1.3	5	2.2	4	0.8	1	2.8
Danish	5	0.6	3	1.3	2	0.4	0	0.0
Other	4	0.5	2	0.9	2	0.4	0	0.0

Table 3. Distribution of languages according to document type (Danish literature)

None of the publications that have published most articles on Catalan literature in the A&HCI (table 4) can be considered to be specialized in Catalan literature, because they hardly receive citations according to studies of the references in the most important journals in the field and therefore do not seem to be relevant to the core of the discipline (Ardanuy; Quintana; Urbano, 2010).

Journal	No of records
Insula. Revista de Letras y Ciencias Humanas	28
Cuadernos Hispanoamericanos	23
Anales de la Literatura Española Contemporánea	11
Bulletin of Hispanic Studies	11
Revista de Occidente	11
Romance Quarterly	9
Hispanofila	8
Modern Language Review	7
Critica Hispánica	6
Romance Notes	5

Table 4. Journals with most articles on Catalan literature

Table 5 shows the journals with five records or more in Danish literature. They represent 64.8 % of the total.

Journal	No. of records
Scandinavian Studies	48
Scandinavica	28
Orbis Litterarum	25
Skandinavistik	22
Europe-Revue Litteraire Mensuelle	21
Akzente-Zeitschrift fur Literatur	5

Table 5. Journals with most articles on Danish literature in the A&HCI

The author with most works on Danish literature in the A&HCI, and therefore with the greatest visibility —especially for researchers who are not specialized in Danish literature— is Frank R. Hugus, of the Department of Germanic Languages and Literatures of the University of Massachusetts, with six articles. The authors with the most works on Catalan literature are the Hispanists David J. Viera, of the Department of Foreign Languages of the Tennessee Technological University, and Gareth D. Walters, of the Department of Hispanic Studies of the University of Exeter, both with four articles.

The records analyzed also show that there is hardly any co-authorship. In the Danish literature there are three articles signed by two authors, representing 1.3 % of the total. In the Catalan literature there are only two articles, representing 1.0 % of the total. This very low level of coauthorship is a characteristic of humanities disciplines in general (Wiberley, 1994; Bourke, 1997; Molteni, 2002; Lowe, 2003) and Catalan literature in particular (Ardanuy; Urbano; Quintana, 2009a).

By periods, in the Catalan literature (table 6) there is an overwhelming predominance of articles from the contemporary period (80.2 %). Of these, 60.4 % are in Spanish and 30.6 % in English. Such a low presence of articles in English makes it difficult for specialists of other literatures to obtain detailed knowledge of the contemporary Catalan literature. The literary author who is the subject of the most studies (11 % of all articles devoted to specific authors), Mercè Rodoreda, corresponds to this period.

Though mediaeval literature shows a lower result overall (19.8 %), in this field there is a greater presence of texts in English (51.5 %). This period is also that of the work most studied, Tirant lo Blanc by Joanot Martorell, accounting for 14.2 % of the records of studies devoted to specific literary works.

Historical periods	No. of	% of	Number of articles by language						
	articles	articles	Catalan	English	French	German	Italian	Spanish	
Contemporary	134	80.2	3	41	5	2	2	81	
Mediaeval	33	19.8	1	17	4	2	3	6	
Modern	0	0	0	0	0	0	0	0	

Table 6. Distribution of articles on Catalan literature by chronological periods

The distribution of articles by periods in Danish literature (table 7) shows a predominance of the 18th and 19th centuries, a period that includes Romanticism, often considered as the Golden Age of Danish literature. Of the articles covering this period, 57.9 % are in English and 29.4 % in German. This period includes the author with most specific studies, Hans Christian Andersen (15.8 %). Andersen is also the author of the work most analyzed in the articles, Den lille havfrue (The Little Mermaid), which accounts for 10.3 % of the articles that deal with specific works.

The literature of the 20th century accounts for 42.9 % of the records, of which 49.5 % are in English and 15.5 % in German. In this period the author most studied is Karen Blixen (10.3 %), who—in spite or because of her bilingual work in Danish and English— is far ahead of the other authors.

The articles covering the 16th and 17th centuries only account for 1.3 %. However, there were also few authors from this period in the list we used to obtain records. This is a period in which Danish literature was far from the splendor that it later reached.

Historical periods	No. of	%	Number of articles by language					
	articles	articles	Danish	English	German	French	Italian	Swedish
18th and 19th centuries	126	55.8	1	73	37	9	0	4

20th century	97	42.9	1	48	15	27	5	1
16th and 17th centuries	3	1.3	0	1	2	0	0	0

Table 7. Distribution of articles on Danish literature by chronological periods

Counting records based on a list or authors or subject categories, as we have done here, is obviously quite laborious. On the other hand, it is very simple to make a search with an expression such as "Catalan literature" or "Danish literature" and the variants mentioned above. Table 8 shows the results obtained by such a search for all document types in literatures with very different numbers of speakers. These values are only intended as an estimate of the order of magnitude because they were not filtered manually. The records obtained in the searches were refined through the specific subject categories of literature mentioned above; the proportion of records removed by this filter ranged from 18 % in Spanish literature to 47 % in Russian literature. The number of records obtained in this way can give us some information on the visibility of the discipline and on its importance in comparison with other literatures.

Whereas for Catalan the number of records obtained in this way, 73, was very similar to the 79 obtained using the manual filter, for Danish the number was 49 compared with 75, respectively. However, the number rose to 76 when we included the subject category "HUMANITIES, MULTIDISCIPLINARY", because a fairly large number of articles on Danish literature have been classified under this heading, whereas this is not the case with Catalan literature.

Literature	Number of records	Approximate number of speakers (millions) (Badia, 2002)	Number of records per million speakers	Index of records obtained (English and American = 100)	Index of number or records obtained per million inhabitants (English and American = 100)
English (and American)	4.965	360	14	100	100
German	5.157	93	55	103,9	402
French	3.296	70	47	66,4	341,4
Spanish	1.370	250	5	27,6	39,7
Italian	1.166	56	21	23,5	151,0
Russian	1.006	155	6	20,3	47,1
Catalan	73	6	12	1,5	88,2
Occitan*	61	3	20	1,2	147,4
Danish	49	5	10	1,0	69,6
Finnish	20	5	4	0,4	29,6

^{*} In the WoS this language is identified as "Provencal" (Provençal), an imprecise descriptor because it refers to one of the dialects of Occitan.

Table 8. Records obtained without manual filtering

The last point to be considered is that the low number of records obtained greatly limits the possibility of working bibliometrically with citation counts. For example, the 230 articles of Danish literature for which we obtained records contain a total of 4,238 citations, but they combine references to primary sources —especially literary works— with references to the academic studies that are the main object of our study. This added problem is not found in the experimental sciences, in which the primary sources are the results of the experiments.

4 Conclusions

Despite the entirely predictable low level of cover of Catalan and Danish literature in the A&HCI, the number of records does provide us with some knowledge of how the discipline operates. The summary of results we have offered is useful when no other information is available and to establish comparisons with bibliometric or scientometric studies that use other sources.

The percentage of records obtained directly with variants of the topic "Catalan literature" and "Danish literature" was 11.6 % and 9.6 % of the total, respectively—a very low value that shows the importance of using a list of authors in each language as a topic. To reduce the impact of this situation, along the lines of the improvements proposed by Neuhaus and Daniel (2008) for the new citation-enhanced databases for research evaluation, it would be highly useful to extend the thematic areas of literature used by the A&HCI (LITERATURE, AMERICAN; LITERATURE, BRITISH ISLES; LITERATURE, SLAVIC; etc.) to include more languages and territories. More importantly, the possibility of applying these criteria should not be offered in the search refinement tool but in the initial search options. Nevertheless, it is also essential that classifying criteria employed are careful and time persistent.

After manual filtering, the number of records obtained with the variants of the topic "Catalan literature" is very similar to that of the records obtained using the filter of specific subject categories of the WoS. However, for Danish literature the figure is lower unless the records of the area "HUMANITIES, MULTIDISCIPLINARY" are added. Nevertheless, the method may be used to establish an order-of-magnitude comparison of the international visibility of studies of a literature. We can therefore conclude that the visibility of Catalan and Danish literature is similar to that of Occitan literature, slightly higher than that of Finnish literature and far lower than English and German literature. This small but non-null presence of literatures in minority languages is a situation that is probably similar to other subareas of humanities with a high geographic specialization, such as local or regional history.

We also observed that Spanish, Russian and Italian literature have a similar visibility despite the great differences in numbers of speakers, but lower than that of French and German. Of course, this system of estimation involves limitations (e.g. it seems unlikely that literature in English has a visibility similar to or lower than literature in German) and can only be used as an indicative tool.

The goodness of the results obtained in this study for Catalan literature is shown by the fairly good agreement with what we know about trends in research in this field. (Ardanuy; Quintana; Urbano, 2008; Ardanuy; Urbano; Quintana, 2009b). These comparisons cannot be made in the case of Danish literature because of the lack of previous bibliometric studies.

It therefore seems clear that the results obtained from of the data of the A&HCI are highly useful and contribute to a mapping of the discipline and its trends. For example, we have observed the evolution of the number of records in the database over time. Whereas in Catalan literature we observe a steady increase in the number of articles, in Danish literature the general trend is downward, despite the increase in the number of articles in the period 1986-1996.

Though the number of records is small and insufficient for some bibliometric studies of citation analysis in minority language literatures (e. g. the H-index), our work suggests that these databases should not be systematically neglected in studies on the state of health of literature and the quality of research. Measuring the level of presence in these databases can indeed help to show whether the study of a specific literature is closed in on itself, especially because comparison can be made with the situation of languages with similar problems. It is likely that no more information can be obtained until international (or European) citation indexes include journals published in minority languages.

References

Ardanuy, J. (2008). *Anàlisi bibliomètrica de la producció científica en literatura Catalana. Barcelona*: Universitat de Barcelona. http://www.tesisenxarxa.net/TDX-0226108-124023/index_an.html>. [Consulta: 25/01/2011].

Ardanuy, J. (2009). "Els estudis bibliomètrics basats en l'anàlisi de citacions en àrees d'humanitats

en el període 1959–2008". *BiD: textos universitaris de biblioteconomia i documentació*, núm. 22 (juny). http://www.ub.edu/bid/22/ardanuy.htm>. [Consulta: 25/01/2011].

Ardanuy, J.; Quintana, L.; Urbano, C. (2008). "Una aproximació bibliomètrica a la recerca en literatura catalana". *Els Marges*, núm. 86, p. 41–66.

Ardanuy, J.; Quintana, L.; Urbano, C. (2009a). "A citation analysis of Catalan literary studies (1974–2003): Towards a bibliometrics of humanities studies in minority languages". *Scientometrics*, vol. 81, no. 2, p. 347–366.

Ardanuy, J.; Quintana, L.; Urbano, C. (2009b). "The evolution of recent research on Catalan literature through the production of PhD theses: a bibliometric and social network analysis". *Information Research*, vol. 14, no. 2 paper 404. http://InformationR.net/ir/14-2/paper404.html. [Consulta: 25/01/2011].

Ardanuy, J.; Quintana, L.; Urbano, C. (2010). "Presencia internacional de los estudios sobre literatura catalana en el A&HCI". *Revista española de Documentación Científica*, nº 33 (2), p. 298–309.

Badia, I. (2002). Diccionari de les llengües d'Europa. Barcelona: Enciclopèdia Catalana.

Bou, E. (2000). Nou diccionari de la Literatura Catalana. Barcelona: Edicions 62.

Bourke, P. (1997). *Discipline Boundaries in the Social Sciences*. Canberra: Academy of the Social Sciences.

Hicks, D. (2004). "The Four Literatures of Social Science". In: Moed, H. F.; Glänzel, W.; Schmoch, U. (eds.). *Handbook of Quantitative Science and Technology Research: The Use of Publication and Patent Statistics in Studies of S&T Systems*. New York: Springer, p. 473–496.

Karlsson, F. (1994). Linguistics in the Light of Citation Analysis. Helsinki: Helsingin Yliopisto.

Katz, J. S. (1999). "The self-similar science system". Research Policy, no. 28, p. 501-517.

Keller, M. A.; Lawrence, C. A. (1980). "Music Literature Indexes in Review: RILM Abstracts (On-Line) and the Arts and Humanities Citation, Music Therapy, Music Psychology, and Recording Industry Indexes". *Notes*, vol. 36. no. 3, p. 575–600.

Lowe, M. S. (2003). "Reference analysis of the American Historical Review". *Collection Building*, vol. 22, no. 1, p. 13–20.

Luukkonen, T. (1991). "Soveltuuko viiteanalyysi tutkimuksen arviointiin?". *Sosiaalilääketieteellinen Aikakauslehti*, no. 28, p. 189–196.

Moed, H.F. (2005). Citation Analysis in Research Evaluation. Berlin: Springer.

Molas, J. (2001). Reports de la recerca a Catalunya: literatura catalana. Barcelona: Institut d'Estudis Catalans.

Molteni, V.; Zulueta, M. A. (2002). "Análisis de la visibilidad internacional de la producción científica argentina en las Bases de datos Social Science Citation Index y Arts and Humanities Citation Index de 1990–2000". *Revista española de Documentación Científica*, vol. 25, nº 4, p. 455–465.

Nederhof, A. J. (2006). "Bibliometric monitoring of research performance in the Social Sciences and the Humanities: a review". *Scientometrics*, vol. 66, no. 1, p. 81–100.

Neuhaus, C; Daniel, H.-D. (2008). "Data sources for performing citation analysis: an overview". *Journal of Documentation*, vol. 64, no. 2, p. 193–210.

Stecher-Hansen, M. (ed.) (1999). Twentieth-Century Danish Writers. In: Dictionary of Literary *Biography*. Detroit: Gale Group, vol. 214.

Stecher-Hansen, M. (ed.) (2004). Danish Writers from the Reformation to Decadence, 1550–1900. In: *Dictionary of Literary Biography*. Detroit: Gale Group, vol. 300.

Wiberley, S. E.; Jones, W. G. (1994). "Humanists revisited: a longitudinal look at the adoption of information technology". *College and Research Libraries*, vol. 55, no. 6, p. 499–509.

Received: 13/03/2011. Accepted: 11/06/2011.

Notes

¹ The authors are listed in the respective entries in WorldCat.

Facultat de Biblioteconomia i Documentació Universitat de Barcelona Barcelona, desembre de 2011 http://www.ub.edu/biblio Documentaris

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