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Carhus Plus+: A classification of social science and humanities journals on the basis of international visibility standards

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Summary. Cultural, geographical, historical, and linguistic factors are inherent to research in the humanities and social sciences, and largely exclusive to these areas. However, the scientific literature has repeatedly shown that citation analysis does not consider the peculiar features of academic journals of those disciplines. Thus, in 2008 the Autonomous Government of Catalonia presented the classification Carhus Plus+, a simple, objective, and reproducible system to measure the profile of academic journals in the humanities and social sciences at the international, state, and local levels from a European perspective. Carhus Plus+ classifies journals in areas of knowledge and groups them into qualitative levels. The variables used in the classification are: impact factor, preferably, or visibility of the journal in the databases; journal format, type of editorial board, and the article-review system. In addition, it considers the special nature of the areas of economics, law, and Catalan studies.

Keywords: Carhus Plus+ · humanities and social sciences evaluation · scientific journals · article citation analysis

Resum. Els factors culturals, geogràfics, històrics o lingüístics són inherents en la investigació en humanitats i ciències socials, i exclusius d'aquestes àrees. La literatura científica ha mostrat repetidament que l'anàlisi de cites no té en compte la casuística específica de les revistes científiques d'aquestes disciplines. La Generalitat de Catalunya va presentar el 2008 la classificació Carhus Plus+, un sistema senzill, objectiu i reproduïble per mesurar el perfil de les revistes científiques d'aquestes àrees a escala internacional, estatal i local des d'una perspectiva europea. Aquest article descriu la metodologia desenvolupada. Carhus Plus+ classifica les revistes segons les àrees de coneixement i les agrupa segons nivells qualitatius. Les variables considerades per a la classificació són: el factor d'impacte, preferentment, o visibilitat de les revistes en les bases de dades; el format de la revista, el tipus de consell editorial i la revisió dels articles. A més, també té en compte les especificitats de les àrees d'economia, dret i catalanística.

Paraules clau: Carhus Plus+ · avaluació d'humanitats i ciències socials · revistes científiques · anàlisi de cites d'articles científics

THIS ARTICLE DESCRIBES THE SYSTEM CREATED by Catalonia's Agency for Management of University and Research Grants (AGAUR) to classify journals and thereby to assist both researchers in producing publications and their peers in reviewing academic output. By way of introduction, the Thomson-Reuters databases have, despite their limitations, been used for several decades to classify journals, although other tools (mainly Scopus) have since emerged. Bibliometric tools have the advantage of providing a theoretically objective system for generating indicators on publications by means of a reproducible methodology. The impact factor (IF), calculated annually by measuring the citations of articles in journals indexed in the

Web of Science (WoS) database, is the benchmark indicator for analyzing academic journals, particularly in the fields of the experimental sciences, engineering, basic research, and some of the social sciences. By using the IF and other indicators derived from it, it is possible to identify the journals that publish the most influential articles within their field at an international level. Thomson-Reuters uses highly selective criteria for including journals in their WoS. These criteria are based on the journal's formal quality standards, so that the articles can be accurately identified in bibliographic databases, with respect to their editorial content and international representativeness, and in citation analyses.

The humanities and some of the social sciences, with their strong social, geographical, and linguistic components, differ from the above-mentioned scientific fields. Additionally, monographs, rather than journals, are the main form of publication, especially in the humanities. Consequently, the tradition of citation is still incipient amongst authors publishing in these fields at an international level, such that journals cannot be effectively ranked on this basis. Moreover, in the humanities and social sciences a large number of the articles are published in languages other than English, which makes international citation all the more difficult [13]. A clear example of the limitation of the IF in the humanities is that Thomson-Reuters does not publish a Journal Citation Report for the humanities and therefore does not calculate an IF for journals in the field. WoS subscribes to the theory (which is debatable in some specialist fields) that academic output is mostly published in the English language, as Thomson-Reuters explains [18] in its selection criteria. As a result, compared to world scientific production, WoS journals in English are overrepresented in its databases [1,14]. In their comparative study of various academic journal lists, Hicks and Wang [7] concluded that journals published by large publishers in English and having a long publishing history have the greatest chance of being included in those lists. Although Thomson-Reuters has, in the last decade, significantly increased the number of non-English-language journals, recent studies [9,12] have shown that for the humanities and social sciences WoS coverage is still very modest.

Not surprisingly then, academics in these areas frequently complain about the invisibility of their publications when measured with globally standardized bibliographic citation indicators. Within the humanities and social sciences, there is great variability between disciplines and specialist subjects. Whilst the publication model for some disciplines, such as economics and psychology, is close to that of the experimental sciences, journals covering other areas are influenced by factors inextricably linked to the cultural, geographical, historical, or linguistic considerations inherent in the object of study itself [9,12]. This leads to a lack of journals of reference with both an international and a local presence. In certain disciplines, such as law, linguistics, literature, and history, publication rates in international journals are low and there is a greater diversity of dominant languages. Thus, any assessment of intellectual output in these fields requires that these factors be taken into account. The direct application of numerical measurement tools to dissimilar fields results in an unrealistic analysis of the quality and impact of bibliographic output [6,8,12]. In short, citation dynamics in the humanities and many of the social sciences are still in their infancy and unrepresentative. This means that the representativeness and quality of the respective journals can only be appreciated by combining the aforementioned databases with other indicators.

Other bibliometric indicators

As an alternative, the Elsevier's Scopus endorsed, in 2010, two other journal metrics: the Source Normalized Impact per Paper (SNIP) and the SCImago Journal Rank (SJR), developed by two teams of Scopus partners and bibliometrics experts. Scopus is a database that offers a wide coverage of journals, particularly in the humanities [3].

SNIP indicators are such that they better fit the characteristics of publications in the humanities and social sciences [3]. First of all, the greater coverage of non-Anglo-Saxon journals by Scopus than by other international databases means the inclusion of a higher number of journals published in other geographical contexts. In addition, an extended 3-year time window for the calculation of Scopus indicators, instead of the 2 years of the IF, is more representative of the characteristics of the humanities and social sciences. Finally, taking into account the different citation habits of the various humanities and social sciences journals, the fact that the SNIP normalizes calculation of the indicator according to the characteristics of the citation's research subject and the likelihood of citation within the database allows the comparison of indicators, both within a subject and between subjects.

The SJR, and especially the redefined new version, SJR2, recognizes the value of citations from closely related journals, compensates for an ever increasing volume of journals, and facilitates comparison by setting an average value equal to one.

Additional alternatives are the tools created by government agencies for academic assessment in the humanities and social sciences: France's Evaluation Agency for Research and Higher education (AERES), the Australian Research Council (ARC) and the European Science Foundation (ESF), with its European Reference Index for the Humanities (ERIH) classification, are some examples. These bodies publish lists of the academic journals of reference in each discipline; these are normally selected by consulting scientists and academics, either by forming panels or by sending out surveys. The lists include a large number of journals and are drawn up with the participation of the researchers to whom they provide ser-

vice. In addition, given that the lists are an instrument of public R&D&I policy, they tend to guarantee a process of debate and public consultation. Nonetheless, some analyses have stressed the lack of neutrality of such lists [15].

Other international initiatives include the Latindex project [see Appendix and article by C. Chica, this issue, pp 151-157], which Spain joined in 1999. The products developed by Latindex include a comprehensive inventory, in the form of a directory, of scholarly journals that have passed a selection process based on a review of 33 variables covering the publication's standards, quality of its editorial processes, and its dissemination. However, it provides no assessment nor does it measure indicators or establish rankings. Latindex's function is, then, one of qualitative assessment aimed at the journals' own self-assessment. AGAUR regards this as a solid benchmark for measuring the formal quality of the included journals. Compliance with academic journal publication standards ensures accurate identification of articles through bibliographic databases, and their presence in the latter increases the dissemination of the journals themselves.

The importance of the ERIH humanities index is that it is a European approach to classifying the core European humanities journals and to highlighting research published in European languages. ERIH is an index of journals drawn up by expert panels. The lists published by the ESF break down journals into 14 disciplines, placing them into three categories based on their international significance, visibility, and influence. According to the ERIH website, these categories are not intended to be hierarchical, but rather descriptive. The classification has been published in two editions, 2007 and 2011, although in the latter the lists for archaeology and religious studies have yet to be published.

Spain, too, has witnessed the development of a number of journal evaluation and analysis projects that focus on the humanities and social sciences. The bibliometric indices In-Recs (*Índice de Impacto de Revistas Españolas de Ciencias Sociales*) and In-Recjs (*Índice de Impacto de Revistas Españolas de Ciencias Jurídicas*) originated at the University of Granada and are based on the methodology of the IF. Beginning in 2004 but recently discontinued, In-Recs calculated an impact index for a total of 761 Spanish social science journals on the basis of the extraction of the references made in 154 source journals. In-Recjs calculated the impact index for law journals whose intellectual output is aimed mainly at Spanish researchers. It thus highlighted the problems with the Thomson-Reuters IF, which drew on the references described in 64 source journals to calculate the IF for 340 journals. Unfortunately, because neither In-Recs nor In-Rejs is currently being updated they can no longer be a robust reference for journal evaluation.

In 2005, the Government of Catalonia introduced the Carhus list of scientific journals. This journal classification

system was designed to support evaluation activities in the humanities and social sciences. Journals from a large variety of sources, both national and international, were included. The Directorate General for Research then charged AGAUR with the system's upkeep, which led to a redefinition of its assessment criteria (as explained below) and to its re-naming. As Carhus Plus+, it would be published periodically (every 2–3 years).

A the end of 2010, the Integrated Classification of Scientific Journals (CIRC, *Clasificación Integrada de Revistas Científicas*), a Spanish quantitative classification of journals from the social sciences and humanities was introduced by some researchers in bibliometry [18]. CIRC is based on the aggregation of different already-existing products: the Journal Citation Reports and the master lists of the Social Sciences Citation Index (SSCI), Arts and Humanities Citation Index (A&HCI) and the Science Citation Index (SCI); the SJR and the master list of the Scopus database; In-Recs and In-Recj; the *Difusión y Calidad Editorial de las Revistas Españolas de Humanidades y Ciencias Sociales y Jurídicas* index (DICE); the Latindex indices; and the ERIH classification. Journals are assessed indirectly on the basis of their presence in these products and their respective evaluations, thereby establishing a hierarchical classification consisting of five categories. This methodology is clearly modeled on that of Carhus Plus+ with regard to both the definition of the journal universe and the classification of the journals. However, the last CIRC version available is that of 2012; since then, the classification of the journals might have changed, such that the use of the CIRC website for subsequent years is questioned.

There are also other projects aimed at measuring the visibility of journals in databases. For example, the Information Matrix for the Analysis of Journals (MIAR), a journal ranking platform at the University of Barcelona, is based on database coverage through the ICDS (Secondary Diffusion Index) (Table 1)[17].

Table 1. Summary of the different factors analyzed by the Information Matrix for the Analysis of Journals (MIAR) and Carhus Plus+ in the year 2010. The current version of MIAR has added new inputs in order to calculate the ICDS (Secondary Diffusion Index).

ICDS (MIAR) http://miar.ub.edu/como.php	
Multidisciplinary databases	
Specialized databases	
Age of the journal (Index Ulrich)	
Survival	
CARHUS http://www10.gencat.net/agaur_web/	
ICDS (MIAR)	50%
Format parameters	25%
Peer review system	12.5%
Editorial committee	12.5%

The CARHUS Plus+ classification of academic journals

In 1996, the Scientific and Technical Assessment Council (CONACIT) of the Inter-ministerial Council for Research and Technological Innovation (CIRIT) of the Autonomous Government of Catalonia proposed a system for research into the humanities and social sciences, including publications prepared for different interuniversity committees to establish the criteria for evaluation. This culminated in the Carhus list of journals, in 2005. Subsequently, and based on this first version, the Government of Catalonia's Directorate General for Research charged AGAUR with drawing up a classification of journals that reflected the academic reality in Catalonia. In 2008, Carhus Plus+ appeared. As a second, improved edition of the 2005 Carhus list, it offered a methodology for assessing journals—at a reasonable cost and with sufficient quality—at international as well as Spanish state and local levels.

The general objectives of Carhus Plus+ are to identify journals of national and international reference in all disciplines of the social sciences and humanities and thus to provide support in scientific assessment processes. Additionally, Carhus Plus+ set itself the initial goal of establishing journals of reference in the field of Catalan studies, defined as research in the fields of Catalan history, language, and literature. One key assumption in drawing up Carhus Plus+ was that all fields should have at least some journals in the highest classification category (group A, described below). In preparing Carhus Plus+, it was considered vital to ensure both an ongoing dialogue with researchers from research centers and a certain degree of methodological consensus.

The methodology for journal inclusion. As noted above, Carhus Plus+ assumes that other indices and classifications have already developed selection processes for academic journals. Taking advantage of these products, it creates a universe of journals for subsequent classification.

The documentary sources are: the 2007 European Reference Index for the Humanities (ERIH); research groups recognized by the Government of Catalonia during 2005 in the fields of social sciences and the humanities; the Impact Index for Spanish Social Science Journals (In-Recs); Spanish Social Science and Humanities journals (RESH); National Citation Reports for Spain 1981–2006; the 2007 and 2009 Journal Citation Reports (JCR) for the social sciences; collective proposals made to AGAUR by (mainly Catalan) universities and research centers; Catalan journals in the fields of language, literature, and history, according to specific sources [2,5,11].

Carhus Plus+ classifies journals into thirteen fields of knowledge (Table 2). Those with only a small number of journals in Carhus Plus+ have been combined with other disciplines. For example, architecture journals are to be found with those of the arts; town planning with those of geography; sport journals with those of education; and translation and interpreting with those in philology, linguistics, and sociolinguistics. Journals on the history and philosophy of science are classified with their respective academic fields of science; thus, journals on history of education, for example, are classified in education.

Assessing journals. Carhus Plus+ classifies journals into four groups, A, B, C, and D (Table 2), with group A being the best regarded (Table 3). The factors considered for the classi-

Table 2. Subject areas in Carhus Plus+ and number of journals in each category

Subject area	A	B	C	D
Anthropology	57	54	33	5
Arts	109	44	97	20
Communication and Information	48	33	30	8
Economics	115	89	74	13
Education	166	139	104	14
General or multidisciplinary[a]	151	104	109	14
Geography and Town Planning	46	43	20	7
History	250	131	210	21
Law	102	56	193	24
Philology, Linguistics and Sociolinguistics	399	176	227	13
Philosophy	132	59	53	3
Psychology	226	298	40	4
Religious Studies	82	38	51	2
Sociology and Politics	167	174	62	16

[a]Featuring journals that are difficult to classify within other fields.

Table 3. Journals for Catalan studies included in Group A of CARHUS Plus+.

Title of the journals
Afers. Fulls de recerca i pensament (Matters. Papers on Research and Thought)
Articles de didàctica de la llengua i de la literatura (Articles on Language and Literature Didactics)
Ausa. Publicació del patronat d'estudis osonencs (Ausa. Publication of the Board of Studies about Vic, Barcelona)
Caplletra. Revista internacional de filologia (Caplletra. International Journal of Philology)
Catalan Historical Review
Catalan Journal in Linguistics
Catalan Review. International Journal of Catalan Culture
Els marges. Revista de llengua i literatura catalana (Els marges. Journal of Catalan Language and Literature)
Estudios de fonética experimental (Studies on Experimental Phonetics)
Estudis romànics (Studies on Romanesque Art)
Estudis. Revista de historia moderna (Studies. Journal of Modern History)
Faventia. Revista de filologia clàssica (Faventia. Journal of Classical Philology)
Manuscrits. Revista d'història moderna (Manuscripts. Journal of Modern History)
Pyrenae
Quaderns de filologia. Estudis lingüístics (Journal of Philology. Studies on Linguistics)
Quaderns. Revista de traducció (Quaderns. Journal of Translation)
Revista de llengua i dret (Journal of Language and Law)

fication are: (i) the IF, preferably, or, in its absence, the visibility of the journals in databases (in the Secondary Diffusion Index (ICDS); see below); (ii) journal format; (iii) editorial committee type; and (iv) review process of original articles.

Journals with a presence in WoS databases or with a ICDS classification of 9.7 or higher are included in group A and are not further assessed for factors 1, 2, and 3. In fact, since they have already been evaluated by Thomson-Reuters, evaluating them anew would be redundant. The remaining journals have been evaluated according to the following criteria:

(i) The ICDS calculates the dissemination of journals in a variety of academic journal databases and directories, both national and international, establishing an indicator scale from 0 to 9.9. This index is the result of a project carried out by the University of Barcelona's Librarianship and Documentation Faculty research group, headed by Cristóbal Urbano and accessible on the MIAR website [http://miar.ub.edu]. Carhus Plus+ has stipulated an exception for the field of law, as it suffers from a lack of visibility in the databases collated by MIAR. Thus, a correction factor of +50% has been applied to the ICDS for law journals, calculated on the basis of their lack of international database coverage.

(ii) Carhus Plus+ analyzes compliance with minimum core standards for academic publications, specifically: (a) fulfillment of the declared publication frequency or the publishing of the declared number of issues for the year— reviewed by consulting the journal's own website, for journals with an electronic version, or by means of library catalogues for the others; (b) the provision of instructions for authors, either in the journal itself or on its website; (c) consistent mention of the au-

thors' affiliations; (d) the inclusion of keywords for every article; and (e) the appearance of an English abstract of the article.

(iii) Also considered is the composition of the journal's editorial board, either (a) internal, with all members belonging to the publishing institution; (b) external, with all members belonging to different institutions in the same country; or (c) international, with members from different institutions and countries.

(iv) The journal must also have a system of independent reviewers to assess articles submitted for publication (peer review). Compliance with this requirement was evaluated on the basis of mention made by the journal itself, either in the instructions to authors or in the form of published information on the reviewers in the first or last issue of the year.

Considering these factors, journals are assigned to one of four groups, A, B, C, and D (see Table 2), with group A comprising journals of the highest ranking. Group A journals meet at least one of the following criteria: (a) presence in the SSCI, A&HCI, or SCI, according to the last published Master Journal List or the JCR; (b) an ICDS score of 9.7 or higher within the MIAR classification, which implies a presence in A&HCI, SCI, SSCI or Scopus; (c) for journals in the fields of Catalan history, language, and literature, given their difficulty in gaining inclusion within international databases, the use of alternative criteria similar to those for categories B, C and D, in which international databases coverage as a main classifying factor is not necessary.

The percentage of journals in a specific field that can belong to group A is limited to 40% of the total number of journals for that field in Carhus Plus+. Once this cut-off of 40% is

reached, the journal is assigned to group B rather than group A even if it meets the cited requirements.

Journals in the field of Catalan studies fulfill the criteria of groups B, C, and D. Nonetheless, the best-ranked amongst them, with an ICDS score >3, are included in group A (Table 3), even if they do not comply with the conditions stipulated for this group.

Journals with no presence in any of the Thomson-Reuters databases or with an ICDS score below 9.7 are evaluated for inclusion in groups B, C, and D. Their compliance with the above-described criteria are assessed—with each of these factors regarded as a variable—and assigned a value. The ICDS score accounts for 50%, publication standards for 25%, and the review system and composition of the editorial board for 12.5% each (Table 1).

Published results

On October 2010 a preliminary version of the Carhus Plus+ list of journals was published, with journals classified into groups A, B, C, and D. In addition, a feedback period was established by the university and research communities. After one year, during which AGAUR received comments and amendments from publishers and researchers on a previously presented version, Carhus Plus+ 2010 was published. The Carhus Plus+ system thus took advantage of input from researchers, editors, universities and all other members of the Catalan research system with professional interest in the classification.

There are still 820 journals that might at some point be included in Carhus Plus+ (Fig. 1), but which have not yet been classified because they are held in libraries outside Catalonia (and mostly outside Spain); although they may be accessible electronically, they are not open access journals, such that certain aspects, e.g., format, can be assessed only with difficulty. Usually these journals are published in German, Hungarian, Russian, or other languages. The outcome of applying what has been published to date is shown in Table 2. Carhus Plus+ is updated periodically. As part of this updating process, the values of all the variables are recalculated and the journals are accordingly reclassified. There are two exceptions to the methodology detailed above: law journals and economics journals.

Law journals. In the field of law, the internationalization of academic output has proceeded more slowly than in other disciplines because of the particular impact of the local and national peculiarities of the legal culture. Furthermore, generally speaking, legal research is disseminated mostly by means of specialist databases, rather than through multidisciplinary channels. A search of all articles indexed in WoS in 2010 showed that, in 55 of the 87 journals appearing in the first version of Carhus Plus+ 2010's law category, at least 70%

of the authors were from the US. Additionally, the bibliography indicated that US journals featured a low percentage of citations of foreign authors [4].
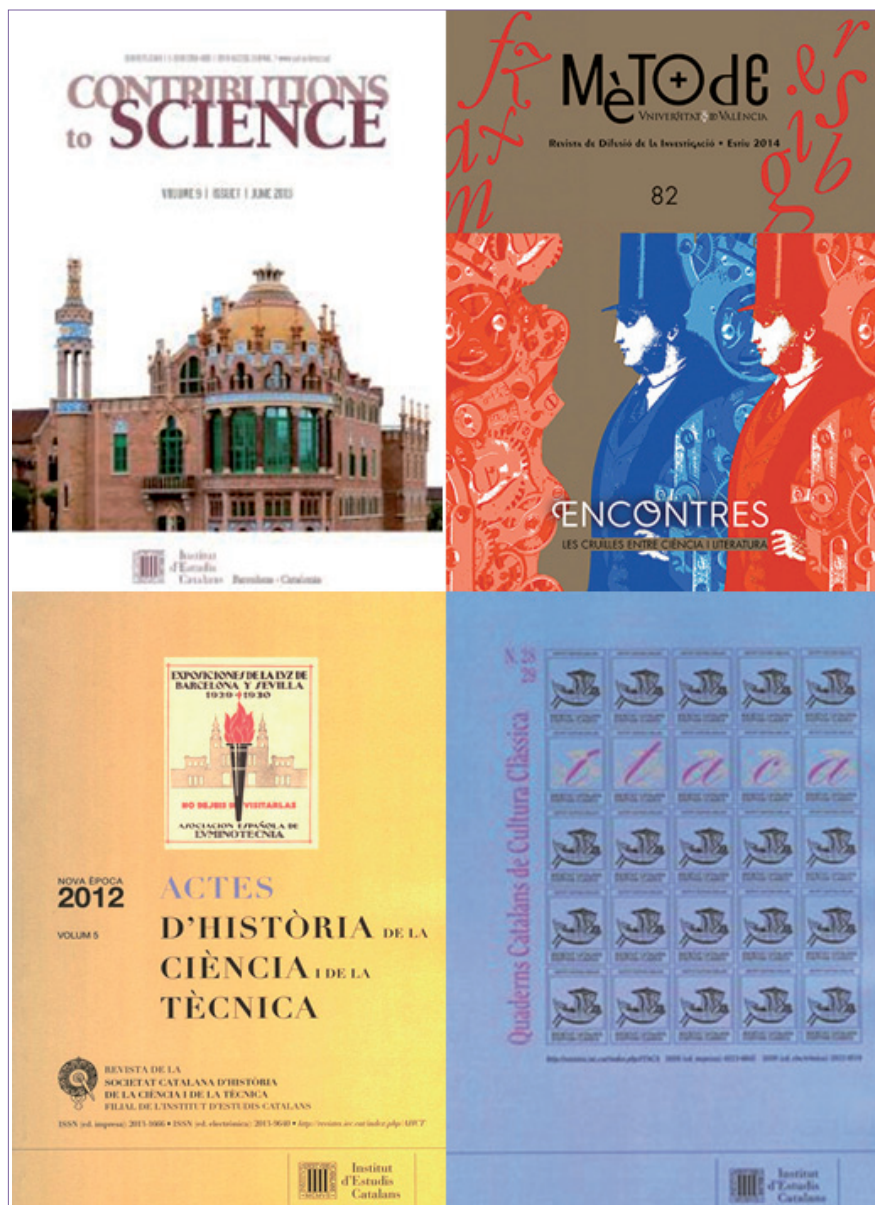
After discussing these aspects with leading researchers at the Law Faculties of Catalan universities, several improvements were introduced: (a) new European law journals were included at the proposal of the Law Schools of Catalan public universities (263 journals were entered into Carhus Plus+). (b) The 55 above-mentioned journals were eliminated (55 publications) because the level of publication in those journals by Catalan and Spanish law researchers was too low to allow an assessment of their publication record. (c) Finally, acknowledging that MIAR does not cover the most representative law databases, the above cited correction factor was applied to improve the visibility of law journals, as noted above.

Economics journals. In the field of economics, as in the hard sciences, the IF is an indicator that the journal is well established and accepted by the research community. After discussion with leading researchers in the field, it was agreed to remove 63 low-ranked journals from the Carhus Plus+ group B classification because they were either in quartiles 3 and 4 of the JCR or they did not appear in this index at all. This served to concentrate the ranking of journals of reference.

Discussion and conclusions

The cultural, geographical, historical, and linguistic factors associated with research in the humanities and social sciences do not occur in other fields, in which citation indices have consolidated their position as the main indicators for assessing academic output. Consequently, the IF is used extensively only in a few social science disciplines and not at all in the humanities. It has also been argued that English-language journals predominate in the Thomson-Reuters databases. To overcome the limitations of the IF and similar indices, humanities and social science publications must be assessed using tools that encompass a broader spectrum of international, national, and local journals.

Assessing intellectual output in these fields requires that their specificities be taken into account. Carhus Plus+ is a classification system for humanities and social science journals that, in the case of the latter, also takes into account citation indices in their assessment. Carhus Plus+ analyzes journals from two complementary viewpoints: (i) the visibility of the journal in representative social science and humanities databases and (ii) based on the observance of certain editorial quality standards that ensure both visibility in databases and the evaluation of content. Note that the classification methodology is reproducible and objective, and therefore transparent. In addition, it is an information system representing academic journals aimed at three groups of interest:

Fig. 1. Four journals included in the Carhus Plus+ classification, three of them published by the IEC. *Mètode* is published by the University of Valencia

Firstly, Carhus Plus+ provides support for the assessment of academic output published in journals. In fact, the classification is mostly aimed at analyzing currently existing journals. As a result, Carhus Plus+ can be used to assess bibliographic output after 2005 (the year in which Carhus first appeared) but not before. However, its application would be difficult in the assessment of long-term curricula without also using other sources. However, Carhus Plus+ can be used to evaluate the scientific track record of groups and researchers applying for research funding, in combination with peer review.

Secondly, it serves as an index of reference for researchers and university academics when it comes to ascertaining where to submit their work for publication. Carhus Plus+ is

a guide that can be used to select journals with the greatest impact at the local, Spanish, and international levels. It is also useful in identifying those journals that do not meet the criteria for an academic journal, such as journals in groups C and, particularly, D. Rather, publication in group A and B journals, i.e., those with the highest impact and international visibility, is preferable.

AGAUR—as a body belonging to the Autonomous Government of Catalonia—has chosen to establish mechanisms that promote research in Catalan studies. However, this does not imply inequality for the other journals in the fields of philology, linguistics, and sociolinguistics. Researchers in Catalan studies should aim for publication in journals included in international databases, preferably those of Thomson-Reuters

or Scopus. Carhus Plus+ is applicable to academic journals in the humanities and social science, whether Spanish or European. As this was one of the objectives from the very start of the project, Spain's main journal indices were used in its development. Moreover, it was the first classification system in Spain to combine different sources of information and, with an emphasis on visibility, to classify journals in the humanities and in the social sciences, thereby allowing their comparison within an international context.

Publishers comprise the third group for whom the classification is potentially of use. Carhus Plus+ can alert publishers to the need for better dissemination of their journals. Indeed, over the years in which Carhus Plus+ has been compiling data on journals, numerous publishers have approached AGAUR to ask how they can improve their publishing processes. The methodology of Carhus Plus+ has the virtue of being applicable to any of the academic journals that periodically contact AGAUR for assessment.

In summary, the utility of Carhus Plus+ as a classification system for evaluating research projects submitted to AGAUR can be extended to any other organization assessing Spanish academic output. ◣

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APPENDIX. Latindex evaluation criteria

Criteria fixed by Latindex for the evaluation of scientific journals published in Latin America, the Caribbean, Spain and Portugal. There are 33 criteria for printed journals and 36 for electronic journals. For a journal to be incorporated into the Latindex catalogue, it must fulfill all basic criteria and at least 75% of all criteria. Evaluation criteria are presented here in its translation into Catalan. The original text, written in Spanish, and its translation into English, are presented in the next article, by C. Chica, pp 151-157, this issue.

Catalan

	Criteris per a revistes impreses	Criteris per a revistes digitals
	Característiques bàsiques (cal complir-les totes)	
1.	Menció del cos Editorial.	Menció del cos Editorial.
2.	Contingut. Com a mínim el 40 % dels treballs seran: *a*) articles originals inèdits, *b*) informes tècnics, *c*) ponències o comunicacions a congressos, *d*) cartes a l'editor o articles breus, *e*) revisions, *f*) ressenyes de llibres.	Contingut. Com a mínim el 40% dels treballs seran: *a*) articles originals inèdits, *b*) informes tècnics, *c*) ponències o comunicacions a congressos, *d*) cartes a l'editor o articles breus, *e*) revisions, *f*) ressenyes de llibres.
3.	Antiguitat mínima 1 any.	Generació contínua de continguts.
4.	Identificació dels autors amb el nom sencer.	Identifació dels autors amb el nom sencer.
5.	Lloc d'edició.	Entitat editora.
6.	Entitat editora.	Menció del director.
7.	Menció del director.	Menció de la URL de la revista.
8.	Menció de l'adreça de la revista.	Menció de l'adreça de la revista.
	Característiques de presentació de la revista	
9.	Pàgines de presentació. Títol complet, ISSN, volum, número, data i capçalera bibliogràfica.	Navegació i funcionalitat. Es recomana un màxim de tres clics per accedir a qualsevol contingut.
10.	Menció de la periodicitat.	Menció de la periodicitat.
11.	Taula de continguts o índex.	Accés als continguts.
12.	Capçalera bibliogràfica a l'inici de cada article. Ha d'incloure, com a mínim, el títol i la numeració de la revista.	Accés històric al contingut. Per un temps mínim de tres anys (si la revista té més de tres anys).
13.	Capçalera bibliogràfica a cada pàgina.	Capçalera bibliogràfica a cada pàgina.
14.	Membres del consell editorial.	Membres del consell editorial.
15.	Afiliació institucional dels membres del consell editorial.	Afiliació institucional dels membres del consell editorial.
16.	Afiliació dels autors.	Afiliació dels autors.
17.	Data de recepció i d'acceptació dels originals.	Data de recepció i d'acceptació dels originals.
	Característiques de gestió i política editorial	
18.	ISSN.	ISSN.
19.	Definició de la revista. Objectius, cobertura temàtica i/o públic al qual va dirigida.	Definició de la revista. Objectius, cobertura temàtica i/o públic al qual va dirigida.
20.	Sistema de revisió. Indicació del procediment per a la selecció d'articles.	Sistema de revisió. Indicació del procediment per a la selecció d'articles.
21.	Avaluadors externs.	Avaluadors externs.
22.	Autors externs. Com a mínim el 50 % dels treballs publicats han de ser d'autors externs a l'entitat editora.	Autors externs. Com a mínim el 50 % dels treballs publicats han de ser d'autors externs a l'entitat editora.
23.	Apertura editorial. Com a mínim dos terços del consell editorial seran aliens a l'entitat editora.	Apertura editorial. Com a mínim dos terços del consell editorial seran aliens a l'entitat editora.
24.	Serveis d'informació. Ha d'estar inclosa en índexs, directoris o bases de dades.	Serveis d'informació. Ha d'estar inclosa en índexs, directoris o bases de dades.
25.	Compliment de la periodicitat.	Compliment de la periodicitat.

Característiques dels continguts

26.	Contingut original. Com a mínim el 40% del contingut seran treballs d'investigació originals, resultats de recerca o creació original.	Contingut original. Com a mínim el 40% del contingut seran treballs d'investigació originals, resultats de recerca o creació original.
27.	Instruccions als autors. Informació sobre els estàndards i normes de la revista.	Instruccions als autors. Informació sobre els estàndards i normes de la revista.
28.	Elaboració de las referències bibliogràfiques.	Elaboració de las referències bibliogràfiques.
29.	Exigència d'originalitat.	Exigència d'originalitat.
30.	Resum.	Resum.
31.	Resum en dos idiomes.	Resum en dos idiomes.
32.	Paraules clau.	Paraules clau.
33.	Paraules clau en dos idiomes.	Paraules clau en dos idiomes.
34.	–	Metaetiquetes. Conjunt de dades per a la identificació y/o descripció d'una font d'informació per a la seva recuperació (molts cercadors usen informació emmagatzemada en metaetiquetes per a indexar pàgines web).
35.	–	Cercadors. Inclusió d'algun cercador per paraules, índexs, etc.
36.	–	Serveis de valor afegit. Alertes, enllaços hipertexctuals, fòrums, guies d'enllaços, etc.