

Evaluation of research activity in architecture and urban studies: research journals

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Presenter: Francesc Fayos Vallés *

Presentation: Marta Serrat-Brustenga[†], Lluïsa Amat Bozzo[‡].

* Francesc Fayos Vallés. Universitat Politècnica de Catalunya · BarcelonaTech (UPC)
Escuela Tècnica Superior de Arquitectura de Barcelona (ETSAB).
Departamento de Física Aplicada (DFA)

† Marta Serrat Brustenga. Universitat Politècnica de Catalunya · BarcelonaTech (UPC)
Servei de Biblioteques, Publicacions i Arxius (SBPA).
Biblioteca de l'Escola Tècnica Superior d'Arquitectura de Barcelona (ETSAB)

‡ Lluïsa Amat Bozzo. Universitat Politècnica de Catalunya · BarcelonaTech (UPC)
Servei de Biblioteques, Publicacions i Arxius (SBPA).
Biblioteca de l'Escola Tècnica Superior d'Arquitectura del Vallès (ETSAV)

I. Introduction

This proposal aims to meet the needs of teachers and researchers from Schools of Architecture, by having an effective route to publishing in order both to communicate with the international specialist community in their field, and to ensure that their contributions are properly valued by universities, regional and national organisations.

Note that publishing in specialised journals is not the only way for teachers and researchers in architecture schools to direct their research activities. In particular, this document should be seen in the context of the overall evaluation of teachers' research showing real progress in terms of knowledge, measurable technological development or methodological innovation (see for example BOE 30-XI-2013 p. 127454).

These activities may be classified into the following sections:

- I. Articles in specialised journals.
- II. Books, exhibition catalogues and congress proceedings.
- III. Architecture and Urbanism competitions.
- IV. Doctoral theses.
- V. Awards and recognitions.
- VI. Publications about the work of a teacher/researcher.
- VII. Patents.
- VIII. Editing a significant journal.

The following categories fall outside the scope of this document:

- Popular science magazines.
- Popular mass-distribution professional magazines.

II. Proposal

The proposal is based on three main principles:

1. **Dissemination of knowledge:** articles published undergoing evaluation should be available to the international community of specialists in the field. As will be seen below, all proposed journals meet this criteria.
2. **Peer review:** each article must be peer reviewed prior to its publication in a given journal. Pairs of reviewers, each specialists in the subject of the article in question, are generally selected by the editor of the journal. Prior to the review, the editor decides

whether articles conform to the scope of the journal. Reviewers should ensure that articles fulfil the following points:

- That the author cites all the background of his own work (**scholarship**),
- That the main argument of the article is original (**originality**),
- That the development of the argument is correct and does not contradict any well-established scientific truths (**correction**)

The peer review process has become the most successful method for international journals to ensure the quality of their contents, but for various reasons, the method of peer review is not sufficiently used in the fields of architecture and urbanism.

Therefore journals that do not apply this process but do have an editorial board have also been taken into account, but awarded equal or lower rankings.

3. Objective criteria for establishing quality: all published articles must fulfil objective criteria to demonstrate their quality. The following criteria have been considered: The **impact factor** of the journal; Its **international visibility**; Its **inclusion in journal rankings** produced by prestigious international institutions.

The impact factor of a journal. This is a numerical rating relating to the number of citations the journal receives. This is used to classify journals arranging them by subject category as seen below. Currently, there are two worldwide indexes establishing impact factors: one compiled by Journal Citation Reports (JCR), by Thomson Reuters, and another by SCImago Journal Rank (SJR), by Scimago Group, which uses data from the SciVerse Scopus database.

The Journal Citation Reports (JCR) calculates the Impact Factor, among other indicators, which is a systematic and objective indicator used to assess journals. This is the oldest source of information, and is the most internationally recognised system of evaluation. JCR measures the Impact Factor of journals using the Science Citation Index and the Social Science Citation Index databases. Although there are many other subject categories of potential interest, the majority of journals related to the field fall into the following categories:

- Construction and Building technology (52 journals) and
- Urban studies (36 journals).

It should be noted that:

- The Science Citation Index (SCI) database is produced by Thomson Reuters and covers science fields. This is accessible from the Web of Science and includes more than 3,700 journals.

- The Social Science Citation Index (SSCI) database is produced by Thomson Reuters and covers the social sciences. It is accessible from Web of Science and includes more than 2,400 journals.

The SCImago Journal Rank (SJR), produced by SCImago Lab, measures the impact of journals using the SciVerse Scopus database, which is produced by Elsevier. This includes summaries, references, and articles of major journals on science, technology, medicine, social sciences and Architecture-Urbanism, among others.

The following SJR subject categories are relate to the field:

- *Building and Construction* (69 journals, 30 of which are also included in the JCR Construction & Building category),
- *Urban Studies* (45 journals, 14 are also included in the JCR Urban Studies category),
- *Arts and Humanities* (93 journals),
- *Architecture* (38 journals).

The following categories are also of interest: *Acoustics* (23 journals); *Civil and Structural Engineering* (138 journals); *Education* (524 journals); *Energy* (48 journals) *Environmental Engineering* (58 journals); *Geography, Planning and Development* (449 journals); *Visual Arts and Performing Arts* (170 journals).

It should be noted that journals which have recently joined the SCI, SSCI and SciVerse Scopus databases undergo a waiting period during which the bibliometric variables are measured (impact, etc.) before they are included in the JCR or SJR rankings. During this period these journals are visible on these databases - this factor affects the scores proposed.

The inclusion of the SciVerse Scopus database and the SJR in this proposal is based on the fact that SciVerse Scopus is a database with wider coverage than the Web of Science in humanities, social sciences and architecture and urbanism journals. The FECYT takes this into account in its selection criteria and is intended to be a platform to position excellent Spanish journals in the Web of Science and SciVerse Scopus. Moreover, the SJR indicator is used worldwide as a tool to measure the impact of journals against the impact factor of the Journal Citation Reports (<http://www.scimagojr.com/news.php?id=30>; <http://www.elprofesionaldelainformacion.com/contenidos/2010/marzo/12.html>).

It is worthy of note that SciVerse Scopus already appears in the CENEAI Resolution published in BOE number 288 which establishes the specific evaluation criteria for the Social Sciences, Politics, Behaviour and Education Sciences, Economics and

Business, History and Art, Philosophy, Philology and Linguistic fields. The importance of the SciVerse Scopus database and the SJR indicator is demonstrated by their use in bibliometric studies and in other reports about journal classifications such as CIRC (Integrated Classification of Scientific Journals).

The **international visibility** of journals is determined by their inclusion in different international databases.

MIAR (Information Matrix for the Evaluation of Journals) measures this visibility for social science journals. It has, among others, the following categories:

- Arquitectura (with 79 journals that are also included in the LATINDEX catalogue)
- Urbanismo y ordenación del territorio (with 59 journals that are also included in the LATINDEX catalogue)

In the MIAR Arquitectura subject category there is only a small number of JCR journals (35 journals) and SJR journals (83 journals). In this category, MIAR collects a lot of journals that are not in JCR, SJR neither in A&HCI. Of these, 44 journals are also in Avery, 41 journals in the RIBA database and 37 journals in ICONDA (catalogs which will be referred to later). In contrast, in the field of Urbanismo y ordenación del territorio, it is important to note that MIAR includes important journals that are not in JCR, SJR or A&HCI.

In addition, there are side fields such as: Estética y filosofía de la cultura (4 journals), Estudios ambientales (275 journals), Geografía en general (318 journals), Historia del Arte (63 journals), etc.

MIAR measures the ICDS (Secondary Broadcast Composite Index) through the inclusion of a given journal in 48 specific and multidisciplinary repertoires. For instance, the following indexes relate to this field:

- Science Citation Index and Social Science Citation Index
- Arts and Humanities Citation Index
- SciVerse Scopus
- LATINDEX (Catalogue)
- DIALNET
- ULRICH'S,

Neither RIBA nor AVERY are considered. According to MIAR the databases that include urbanism journals are considered social sciences databases. The contribution of MIAR is significant for this reason, amongst others.

With regard to the ranking score, it should be noted that, in the fields of Architecture and Urbanism, only journals in SCI, SSCI, A&HCI and SciVerse Scopus have ICDS over 6,477. Therefore, and in accordance with the ranking table, MIAR with ICDS > 7.5 could actually be removed without affecting the valuation of any journal in this catalogue.

Finally, it should be remembered that mere inclusion in the LATINDEX Catalogue gives a score of 2.5 points.

The Arts & Humanities Citation Index is a database that does not measure the Impact Factor of journals. However, these publications do go through a demanding selection process by Thomson Reuters. For this reason, as well as for its historical development, this database has an outstanding international reputation. It should be noted that of the 43 journals in the field of Architecture and Urban Planning, 37 are peer reviewed or have an editorial board, of which 34 are in SciVerse Scopus and 29 are in SJR.

Avery Index to Architectural Periodicals is a database produced by Columbia University and includes articles with references on architectural design, architectural history and practice, interior design, urban planning, etc. in journals of international scope. It is significant for the number of journals, both academic and professional, which it includes in the areas of architecture and urbanism.

The RIBA Online Catalogue is a catalogue of the Library of the Royal Institute of British Architects (RIBA). It includes articles from over 400 journals covering all aspects of architecture published in 45 countries. It is currently indexing 219 journals.

AVERY and RIBA have little presence in JCR: 18 journals, while SJR includes a total of 56 journals from these databases.

ICONDA (International Construction Database) is a database containing about 550,000 references from more than 400 specialized publications in the field of construction, civil engineering and architecture.

ICONDA includes a significant number of JCR and SJR journals. This means that the journals covered by JCR journals of Construction & Building Technology and SJR journals of Building and Construction are included in a construction database such as ICONDA.

FECYT. The Spanish Science and Technology Foundation has selected 110 journals which it considers excellent, all of which are peer reviewed. The fields of Science and Technology include some journals of interest to the field of architecture and urbanism. The selection criteria analyses the number of citations received, giving more weight to citations in SCI, SSCI and A&HCI, and SciVerse Scopus. Therefore, most of their journals are located in higher positions in the ranking table.

Institutional evaluation proposals. Given the difficulty of assessing academic production in the humanities, arts and social sciences, various institutions have developed proposals for the evaluation of journals in these fields. Some of these proposals are taken into account in this document.

ERIH: The European Reference Index for the Humanities (European Science Foundation) is developed by European researchers with the intention that their proposals, sometimes in their own languages, become more visible to the rest of the world. Their categories are International 1 and 2, and National in the *Art and Art History section*.

ERIH International gathers European and non-European journals recognized as significant by researchers in their areas of expertise, and which are regularly cited.

Depending on their influence and scope these are classified as follows:

- International 1: international publications with high visibility and influence and which are regularly cited.
- International 2: international publications with high visibility and influence.
- National: publications with a recognized academic role among researchers in a given discipline. These journals are recognized at a national level.

ERIH International 1 and International 2 include 51 Avery journals, 40 RIBA journals and 33 ICONDA journals.

CARHUS + classifies scientific journals in the fields of Social Science and Urban Planning within the subject category of Geography and Urban Planning (116). This classification is relevant as some of our professors publish in their journals. These journals are grouped in areas close to architecture and urbanism and are classified into categories A, B, C or D.

- A: Presence in SSCI or in A&HCI, ICDS > 9.5.
- B, C, D: 50% ICDS, 25% formal aspects, 12.5% review process, 12.5% editorial board.

The following table indicates how many journals of each database –in columns– are included in the other databases –in rows–, taking into account the different subject categories.

	MIAR- Arch.	MIAR- Urb.	ERIH	AVERY	RIBA	ICONDA	EAAE
JCR: <i>Construction & Building</i>	1	0	0	0	5	28	13
JCR: <i>Urban Studies</i>	1	21	2	5	2	3	30
SJR: <i>Architecture</i>	9	1	8	11	14	13	28
SJR: <i>Building & Construction</i>	2	0	2	3	5	23	13
SJR: <i>Urban Studies</i>	2	14	2	5	6	6	13
A&HCI: <i>Architecture</i>	21	5	17	27	26	22	39
AVERY	35	14	48	113	58	40	77
RIBA	35	8	39	58	101	64	75
ICONDA	30	9	28	40	64	130	68

The following table shows the total number of journals in a particular database, taking into account the closest subject categories to the field; and the number of which have peer review and/or an editorial board. The following acronyms are used:

- Total: Total number of journals in a database on a subject category
- PR: journals with peer review
- EB: journals with an editorial board

	Total	RP	CE	PR+CE
JCR: <i>Construction & Building</i>	52	49	3	52
JCR: <i>Urban Studies</i>	36	35	1	36
SJR: <i>Architecture</i>	37	29	7	36
SJR: <i>Building & Construction</i>	69	46	14	60
SJR: <i>Urban Studies</i>	45	38	7	45
A&HCI: <i>Architecture</i>	41	27	10	37
Miar: <i>Arquitectura</i>	134	40	25	65
Miar: <i>Urbanismo</i>	95	65	12	77
ERIH: <i>Arts</i>	421	113	93	206

	Total	RP	CE	PR+CE
AVERY	239	61	51	112
RIBA	219	64	38	102
ICONDA	207	101	30	131
EAAE	592	261	110	371

Therefore, taking into account the priority criteria listed above:

- i) High scores are awarded to journals with a known impact index, above journals that are only included in certain international databases, or included in the so-called Institutional evaluation proposals. Exceptions to this are:
 - a. A&HCI because of its international prestige, and
 - b. FECYT and ERIH international 1 because in both cases they take into account the impact of their journals as indicated above.
- ii) Apart from JCR and SJR journals (which have impact indexes), higher scores are awarded to peer-reviewed journals than to journals which have only an editorial board.

Impact indexes	JCR Q1, Q2 SJRQ1	JCR Q3, Q4 SJR Q2, Q3	SJR Q4		
Visibility		A&HCI.	SCI, SSCI, SciVerse Scopus, FECYT, RIBA y AVERY.	MIAR ICDS \geq 7.5, RIBA, AVERY.	MIAR, ICDS \geq 2.5, ICONDA, EAAE.
Institutional evaluation proposals			ERIH Int 1.	ERIH Int 2, Carhus+ A-B.	ERIH Nat, Carhus+ C-D.
Peer review	10 (A+)	9 (A)	8 (B+)	6 (B)	4 (C)
Editorial board	10 (A+)	9 (A)	6 (B)	4 (C)	2 (D)

Articles published in A+ to B journals count towards the five articles required to sexennium.

Note that to achieve a certain score it is only necessary to meet one of the criteria listed vertically in each column. For instance, a peer reviewed journal obtains the score 6 (B) whilst being only in ERIH Int 2.

Also, note that to some degree JCR is equated with SJR. This is one of the most important features of this proposal which has been abundantly justified throughout this document and has been corroborated by the specialist literature.

Furthermore, given that both JCR and SJR need a period of one to two years to calculate the impact factor of a journal recently accepted by SCI, SSCI and SCOPUS respectively, it is suggested that journals in these databases are already ranked as indicated in the table.

This proposal allows authors to know which journals are of interest and which are the best rated in order to send articles for publication.

Finally, if a particular journal is located in different parts of the table, it will be awarded the highest score achieved.

III. More journals of interest

It may be that members of the community of architecture teachers consider the range of journals defined above is insufficient.

In this case, the "Conference of Directors of Schools of Architecture in Spain" has drawn up a list that can be found in Appendix I. This list contains journals from the ETSAM proposal that are not covered in the ranking table. These journals are ranked according to the judgment of the evaluator.

IV. Concerning the catalogue "Revistas indexadas con Índice de Calidad Relativo: plataforma de ayuda a la investigación"

This catalogue (referred to here as the ETSAS catalogue), is published by the "Library of the School of Architecture of Seville" (ETSAS) and the "Institute of Architecture and Building Science, University of Seville". It has two aims: to guide ETSAS teachers in "ANECA accreditations" and for obtaining "Sexennium" by CENEAI. The ETSAS contribution is used as a benchmark to see to what extent the current proposal coincides with this catalogue. The following table indicates the number of journals that are considered according to the present proposal, and according to the ETSAS catalogues (note that journals that only accept articles requested by the editor or the editorial board have not been taken into account).

Comparison	Journals using this proposal	Journals using ETSAS proposal
JCR: <i>Construction & Building</i>	52	32
JCR: <i>Urban Studies</i>	36	26
SJR: <i>Architecture</i>	37	17
SJR: <i>Building & Construction</i>	69	23
SJR: <i>Urban Studies</i>	45	17
A&HCI: <i>Architecture</i>	37	34
Miar: <i>Arquitectura</i>	65	33
Miar: <i>Urbanismo</i>	76	33
ERIH: <i>Arts</i>	205	37
AVERY	112	44
RIBA	102	47
ICONDA	131	77
EAAE	370	96

As can be seen, a considerable number of the journals considered are also included in the ETSAS catalogue.

V. Concerning the catalogue "Revistas seleccionadas por el Departamento de Urbanismo y Ordenación del Territorio de la UPC"

Recently, Professor JL Oyón has prepared a list of journals for the Department of Urbanism, UOT at the UPC with the dual objective of academic accreditation and obtaining sexennium. The UOT proposal may be compared with the present proposal:

Comparison	Journals using this proposal	Journals using UOT proposal
JCR: <i>Construction & Building</i>	52	1
JCR: <i>Urban Studies</i>	36	34
SJR: <i>Architecture</i>	37	3
SJR: <i>Building & Construction</i>	69	0

Comparison	Journals using this proposal	Journals using UOT proposal
SJR: <i>Urban Studies</i>	45	30
A&HCI: <i>Architecture</i>	37	10
Miar: <i>Arquitectura</i>	65	19
Miar: <i>Urbanismo</i>	76	72
ERIH: <i>Arts</i>	205	12
AVERY	112	35
RIBA	102	33
ICONDA	131	32
EAAE	370	95

In conclusion, the JCR, SJR and MIAR urbanism catalogues are fairly well represented in the UOT listing.

VI. Conclusions

1. This classification proposal for specialised journals in the fields of architecture and urbanism, uses objective criteria to determine quality - it is not a list of journals considered to be of good quality according one particular teacher or a limited group of teachers alone. This set of journals and their assessment have been obtained through applying a set of universal criteria to the process of evaluation.
2. This proposal aims to provide unified guidelines for evaluators to judge as accurately as possible the criteria for evaluation, as is the case in other areas of knowledge. This should lead to greater transparency in the evaluation process and greater reliability for those who follow this process.
3. The major strength of this proposal lies in its use of objective factors to determine the quality of journals. An additional list of journals which are not included in the overall proposal, but which follow academic consensus, is intended to address the potential shortfall of the proposal (since this or any other model will inevitably be incapable of responding comprehensively to such a complex situation).
4. This document proposes a ranking of journals that, rather than being fixed, will evolve over time. Generally speaking, the quality of a journal may vary depending on the quality of contributors and its overall impact. If this happens, it would mean that, certain JCR or SJR journals, for instance, may increase their impact whilst others might lessen (such variations are very common in other areas of knowledge). Similarly, some

journals could choose to be indexed in SCI or SSCI databases, and in SciVerse Scopus, with the aim of gaining a better understanding of their impact in relation to other journals in the same field, (through the JCR impact factor or SJR impact index), and thus be able to decide their future publishing slant. This fact would place them amongst the highest rated journals (this has already occurred with some editorial boards of journals based in our schools of architecture: *ACE: architecture, city and environment* already is in SciVerse Scopus, *EGA: architectural graphic expression journal* is in A&HCI and others will soon follow).

5. This proposal must be seen in its historical context: it has arisen out of recent revisions of the evaluation system (2005) both in this field and in others (such as social sciences which traditionally were poorly served by the evaluation process), and will most likely require further revisions in the future (one possibility would be an obligatory review six years after its approval). The constant improvement of the publishing landscape and the rapid development of information technology and communications have formed part of the need for this review, and will probably be the reason for future revisions as well. However, as has been observed in other areas, there are classification systems that do survive the test of time. For this reason, this proposal is firmly committed to impact as the main objective factor used to evaluate quality. Therefore both JCR (always highly regarded by evaluation organisations) and SJR (SciVerse Scopus which is expanding greatly due to its quality and flexibility) have been given priority.
6. The results presented in this proposal are not radically different from other fields that have also updated their assessment systems. For instance, the CIRC group proposals in other areas of knowledge confirm that the SciVerse Scopus database (along with the SJR classification system) is gaining greater importance within the international community. On the other hand, the European proposals, especially ERIH by the European Science Foundation, are reaching maturity. We therefore appreciate the efforts that the European Science Foundation and the European Association for Architectural Education is doing to give value to European journals.
7. Finally, the current good position of our schools amongst the best schools of architecture in the world gives this proposal a greater chance of gaining influence, which would help to improve the wealth of knowledge whilst avoiding the sacrifices which would be required in adapting to an alternative system.

VII. Final comments

This text, which has taken into consideration the opinion of many contributors within the academic system, **has been unanimously approved by the *Comisión Permanente de la Conferencia de Directores de Arquitectura de España* on May the 22nd, 2013, incorporating some amendments to the text originally approved by the *Conferencia* on November the 5th, 2012.**

This proposal is therefore submitted for the consideration of the CNEAI so that it may be used by evaluating organisations by providing a set of minimum scores in the tables included. Journals listed in the "Further journals of interest" may be rated according to the discretion of the evaluator, along with other contributions made by the researcher under evaluation.

Appendix I. Other journals of interest

Title	ISSN-L
A+T (Vitoria – Gasteiz)	1132-6409
Arca (Milano)	0394-2147
Architecti	0004-2692
Architects' journal (London)	0003-8466
Architectural monographs	0141-2191
Architecture d'aujourd'hui	0003-8695
Architecture intérieure, CREE	0294-8567
Architecture Ireland	1649-5152
Architecture today	0958-6407
ArchitectuurNL (Doetinchem)	1570-6621
Architektonika Themata	0066-6262
Architektur-Wettbewerbe	0341-2784
Arkitektur	0004-2021
Arkkitehti	0783-3660
Arquitectos (Madrid. 1984)	0214-1124
Arquitectura viva	0214-1256
AV Monografias	0213-487X
Baumeister (München)	0005-674X
Bauwelt (1952)	0005-6855
C.A. (Santiago)	0716-3622
Canadian architect	0008-2872
Construction moderne	0010-6852

DB. Deutsche Bauzeitung (1981)	0721-1902
Documentos de arquitectura (Almería)	0214-9249
GA document	0389-0066
GA houses	
JA (1991)	1342-6478
ON diseño	1695-2308
Pasajes de arquitectura y crítica	1575-1937
Quaderni dell'Istituto di Storia dell'Architettura	0485-4152
RIBA journal	1463-9505