

RESEARCH ASSESSMENT IN ROMANIA

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CONTEXT

- *2002: Ad Astra association founded*
- *2007: Presidential Commission for the analysis and development of Romanian science and education policies*
- *2008: National deal on education*
- *2009: new government: Daniel Funeriu as minister of education & research*
- *2011: New law of education, major reforms*



SOME FEEDBACK

- *praised by European Commission*
- *Nature: “exemplary laws and structures for science”*
- *French minister of education: “a miracle”*
- *... but many essential features have been eliminated by the current government*

MAIN PURPOSE OF
REFORMS

- *Improving the efficiency of spending public money in education and research*
- *Allocating resources (jobs in higher education and research, research grants, institutional funding) according to performance*

RESEARCH
ASSESSMENT

- *Key for allocating public funding and jobs according to scientific performance*
- *Context:*
 - *large scientific diaspora, but many obstacles for people educated abroad who wanted to come back;*
 - *quasi-arbitrary allocations of public funds for institutional funding;*
 - *subjectivity in reviews for research grants;*

HABILITATION

- *Previously: national-level committee approved or vetoed applications previously approved by hiring committee, departmental committee, faculty committee, senate, and rector, based on a file record;*
- *New procedure:*
 - *does not depend on prior approval by a particular institution;*
 - *presenting a synthesis of prior research to a committee of experts;*
 - *eligibility for applying to full professorship jobs, for supervising PhD students;*

MINIMAL
SCIENTOMETRIC
STANDARDS

- *Eligibility to apply for various levels of faculty positions in universities:*
 - *Preventing nepotism, academic inbreeding...*
 - *Providing incentives for relevant research*
 - *Setting expectations*
- *Eligibility to apply to the main competitive calls for research funding:*
 - *Stopping from the start inappropriate pressures on review*
 - *Limiting the number of applications (but not competition) in the context of introducing mostly foreign reviewers*
 - *Setting expectations*

GRANT
APPLICATIONS

- *Introducing mostly foreign reviewers*
- *Rebuttal phase*

CLASSIFICATION OF
UNIVERSITIES,
RANKING OF STUDY
PROGRAMS

- *Coordinated by EUA*
- *Indicators-based quantitative component, updated yearly*
- *Assessment by committees on the field, once every 4 years*
- *Used to establish how to allocate money among universities and programs (previously: quasi-arbitrary decision of the minister)*

EVALUATION AND
CLASSIFICATION OF
RESEARCH
INSTITUTES

- *By expert committees, mostly composed by foreign scientists, on the field, informed by data and reports*
- *Classification in 4 categories: A+, A, A-, B, C*
- *Once every 5 years*
- *Used to condition institutional funding on a certification at A+/A/A- level*
- *Institutional funding would have depended on quantitative indicators, including scientometric ones, updated yearly*

SYNTHESIS

For individuals

- *Minimal scientometric standards for eligibility*
- *Final decisions taken by committees after peer review*

For institutions

- *Assessments through peer review by committees (once every 4-5 years)*
- *Assessments through numerical indicators (including scientometric ones), updated yearly*

RELATIVE ARTICLE
INFLUENCE SCORE

- *Desired characteristics:*
 - *Prevent gaming, incentivizing relevant research*
 - *Field-normalization*
 - *Simplicity, for manageability and for auditing*
- *The impact factor: much too inappropriate*

MINIMAL
STANDARDS:
GRANTS

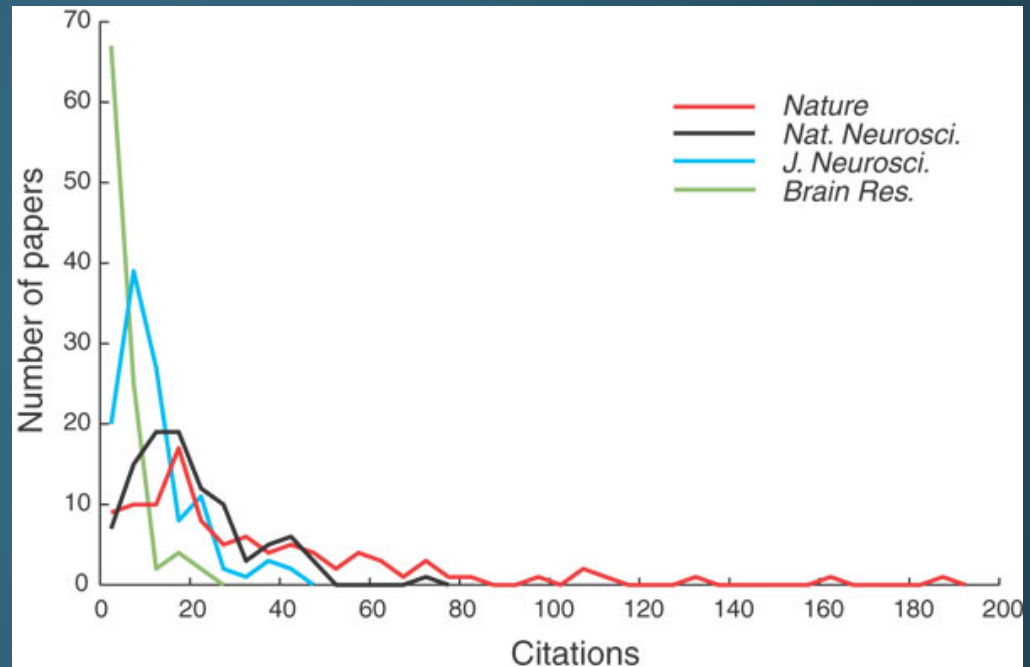
- *Fundamental research, about 350k euros for 3 years*
- *Natural sciences: total RAIS of at least 2 from publications with at least 0.5 (as main author, from the last 10 years);*
- *Social sciences: publications with at least 0.25, books or book chapters indexed in at least 3 foreign university libraries according to WorldCat*
- *Humanities: A&H Citation Index publications, books, book chapters (same conditions)*

MINIMAL
STANDARDS:
POSITIONS

- *About 18 different variants, by field*
- *Sum of RAIS for publications in journals having a RAIS above a threshold*
- *Counting citations from journals with a RAIS above a threshold, or summing the RAIS of citing journals*
- *Indicators normalized to the number of authors, and indicators for the work performed as main author*
- *Formulas preventing sampling from a very small sample when computing average number of citations or similar indicators*
- *Engineering: Australian ranking of conferences*
- *Engineering: patents generating revenues about certain thresholds, as alternative to publications*
- *SS&H: counting points corresponding to various categories of publications (up to 22 categories, and 9 thresholds for indicators, for one field)*

ISSUES

- *Baroque multiplication of indicators when accounting for field specificities*
- *Unavailability of domain-normalized, article-based indicators using weighted citations*
- *Container-based indicators: a choice of last resort*
- *Solution: back to the peer review!*



PRE-PUBLICATION
PEER REVIEW

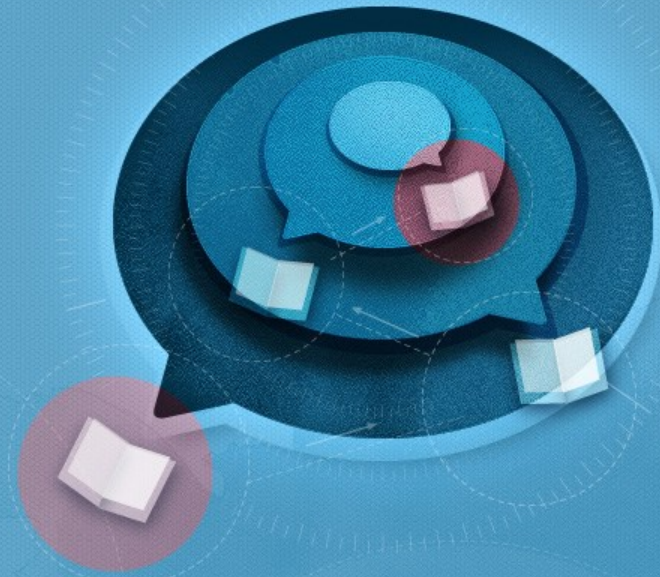
- *Quantitative assessment of relevance performed by reviewers (and editor) is thrown away when only a binary acceptance decision is made available to the public*
- *Reconstructing the original assessment by averaging a wide, skewed distribution – a poor choice*

CITATIONS

- *Waiting for citations to occur...*
- *Does not give quantitative information (which does exist)*
- *No information at all about papers read but uncited*
- *Relevance of citations within a paper is certainly not the same*
- *Post-publication peer review*



EPISTEMIO



- *Aggregating ratings and reviews from scientists who have read the publications or are interested in reading it anyway*
- *Ratings: domain-independent, universal; no more differences in assessment for journals, conferences, books, preprints, no ad-hoc normalizations...*
- *Get away with the limits of ad-hoc committees:*
 - *More reviewers, eliminating bias*
 - *Specialized in the core area of the reviewed publications; reviews more likely to account for the content, rather than the prestige of the container*
 - *Eliminating waste of time, cutting travel & accommodation costs*

ISSUES: UNIVERSITY
ASSESSMENT
EXERCISE

- *Many errors in publications-related data*
- *Ministry had to issue a call for re-checking of data by universities, but errors remained, some universities were penalized*
- *Data seemed to be mostly collected through manual processes, Excel files, email*



EPISTEMIO



- *Epistemio Outcomes: www.epistemio.com/outcomes*
- *Lightweight research information management system focused on publications*
- *Aggregating lists of publications at various levels: research groups, labs, departments, universities, national system*
- *Embedding lists on web pages*

THANK YOU!

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