Towards a Current Research Information System?

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Outline

- Introduction: CRIS and PBRFS
- Loginmiur as a national bibliographic database
- Loginmiur's integration in the research evaluation system
- The IRIDE project
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Introduction: CRIS and their uses

- Current Research Information Systems (CRIS) are increasingly being used to standardise and ease documentation, communication and administration of research
- In the most advanced versions, CRIS help produce integrated data from what used to be documents for separate purposes; searchable bibliographic references may lead on to full texts in local repositories.
- If CRIS data are structured and quality-assured for statistical purposes, research performing and funding organisations may also use them for monitoring and evaluating research activities and outputs, allocating funding, supporting decision making on their policies and strategies, tracking researchers' careers.
- Across Europe 23 countries have a national CRIS or a bibliographic database or repository with a similar function.

Introduction: CRIS and PBRFS

- An advanced CRIS is not the same as a repository of publications or a bibliographic database. A CRIS unites all information sources that are relevant for the administration of research activities in one dynamic interrelated system.
- Still, as CRIS do not index citation themselves, data will need to be matched to another data source, usually to Scopus or Web of Science, for purposes of citation analysis (if needed).
- Thus an advanced CRIS is especially useful for countries that also feature performance-based research funding systems (PBRFS) as it greatly facilitates research assessment at whatever level it is carried out



The Italian case: Loginmiur

- The Italian experience is, in many ways, peculiar:
 - several component parts of a CRIS are already in place, including a national bibliographic database called Loginmiur;
 - national-level research assessment exercises are ongoing;
 - nevertheless a system that unites all information sources relevant for the administration of research activities still does not really exist.
- Italy thus does not (yet) possess a proper, advanced Current Research Information System; *Loginmiur* is, as we will see, more akin to a national bibliographic database, although a number of additional features, useful for purposes of research evaluation, have been inserted on it.

Loginmiur as a national bibliographic database

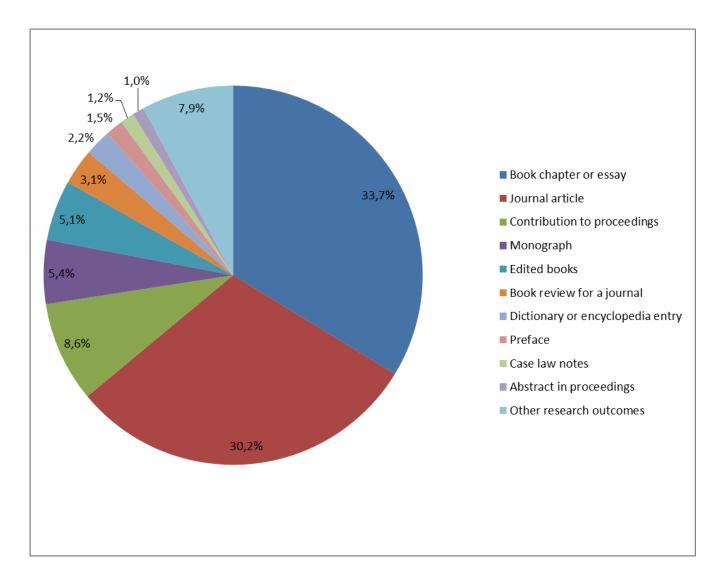
- By 'bibliographic database' or 'database for research output', we mean a structured set of bibliographic metadata (e.g. title, publication type, year, and author) in line with requirements for data when calculating the most basic indicator of research output, namely, the number of publications, similar to that suggested by Moed and colleagues (Moed et al. 2009)
- Loginmiur possesses such features and is, indeed, also quite comprehensive:
 - includes publications authored by doctoral students
 - includes publications from all SSH disciplines, as well as from other disciplines
 - includes publications in any language
 - Includes also publications addressed to the general public

Loginmiur as a national bibliographic database (2)

- Loginmiur is a centralized system for archiving research outputs; individual researchers feed their own works into it, either directly or through databases maintained by their institutions.
- In terms of publication types, *Loginmiur* collects data on journal articles, articles in books, monographs, edited books, and articles in conference proceedings.
- A very substantial number of publication by Italian scholars are thus stored in *Loginmiur*, and its holding (and related statistics) provide, for example, interesting data regarding the kind of publication outlets they actually use.
- Relevant data on this are hereafter provided for the areas of Humanities, Social Sciences and Law (as well as wholesale ones on all the disciplines not subjected to evaluation through bibliometrics in the Italian research evaluation system).

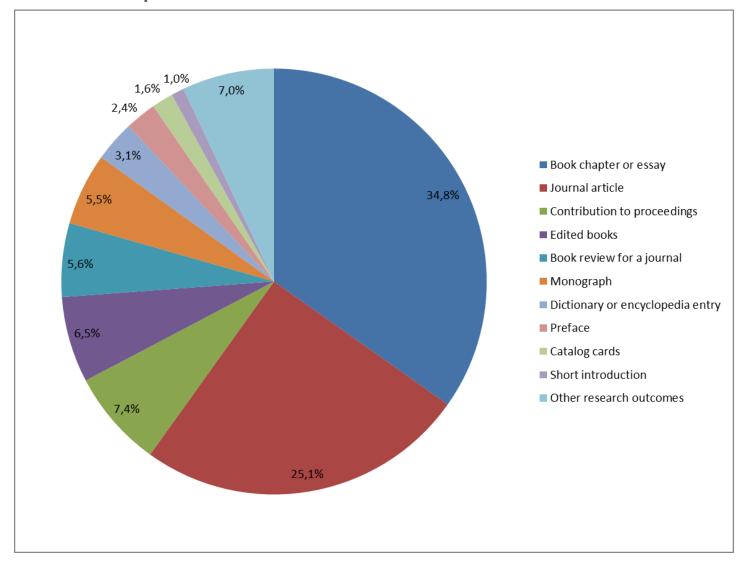


Breakdown of publication outlets – all disciplines not evaluated through bibliometrics



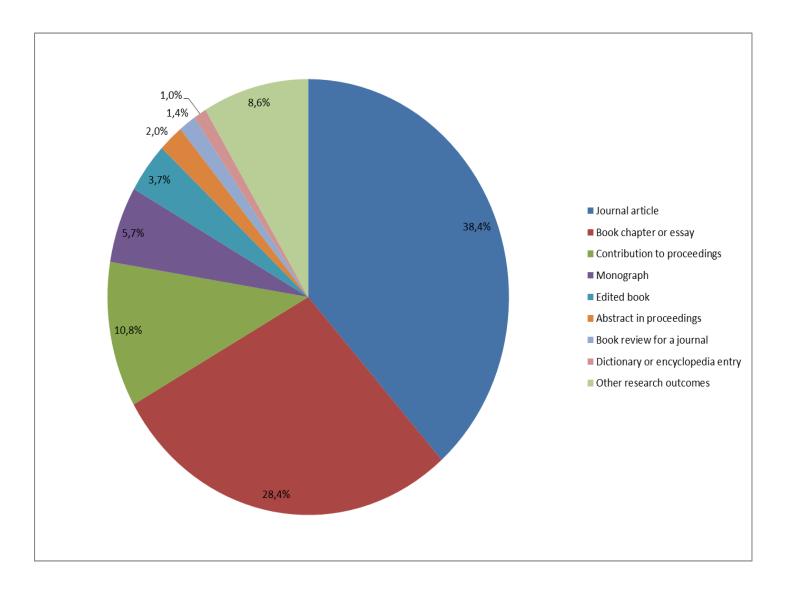


Breakdown of publication outlets – Humanities



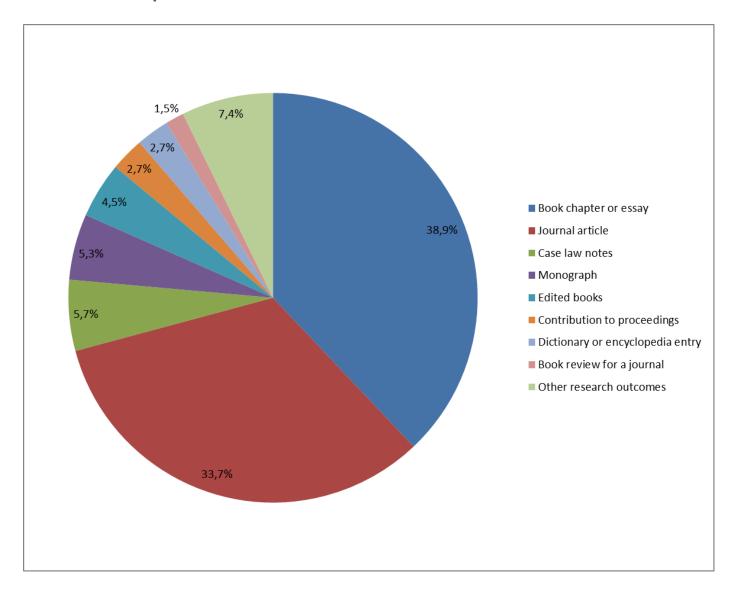


Breakdown of publication outlets – Social sciences





Breakdown of publication outlets – Law



Loginmiur as a national bibliographic database (2)

- Loginmiur is a centralized system for archiving research outputs; individual researchers feed their own works into it, either directly or through databases maintained by their institutions.
- In terms of publication types, Loginmiur collects data on journal articles, articles in books, monographs, edited books, and articles in conference proceedings.
- Loginmiur however lacks exclusion criteria defining publications (or typologies) that are allowed and others that are not. E.g. there are no requirements that an item needs to be peer-reviewed in order to be included in Loginmiur (contrary to what happens in other European CRISs)
- Although there is (since 2009) a law mandating the creation of a national database of the scientific publications by researchers enrolled in the Italian universities, it has never been enacted.
- Exclusion criteria for such a database, publicly discussed in 2013, have never been formalized and enforced.

Loginmiur's integration in the research evaluation system

- Loginmiur was not originally intended for purposes of research funding allocation (even if it is currently also used for such purposes)
- However, subsets of Loginmiur are linked with the Italian research evaluation system:
 - universities select from Loginmiur the 'research outputs' they submit for periodical research assessment exercises
 - individuals select from Loginmiur the 'research outputs' they submit to the national committees charged with the evaluation of candidates to the Abilitazione Scientifica Nazionale
 - More generally, ANVUR uses data from Loginmiur for a number of purposes, such as establishing 'minimum thresholds' of indicators of scientific qualifications (used for ASN, but not only); maintaining classification of scientific journals; chartering and/or accrediting PhD courses

The IRIDE project: aligning *Loginmiur* with local and international databases

- As preparations for the 2011-14 research assessment exercise got underway, a project called IRIDE (Italian Researcher IDentifier for Evaluation) was launched by ANVUR and other Italian institutions engaged in research administration such as CINECA and CRUI.
- IRIDE's aim was to provide with an *Open Researcher and Contributor ID* (ORCID) everyone who was supposed to submit research outcomes for evaluation in the incoming research assessment exercise.
- ORCID was subsequently to be used as an identifier within the *Loginmiur* system, connecting unequivocally each researcher to any publication (research project, awards, etc.) related to him/her.

The IRIDE project: aligning *Loginmiur* with local and international databases (2)

- The use of the ORCID identifier within *Loginmiur* aimed to align local (university-level) and international databases, including those used for citation analysis such as Scopus and Web of Science.
- As the latter ones were used for purposes of research evaluation (though not for SSH scholars), the use of ORCID to connect them with *Loginmiur* allowed for the resolution of otherwise thorny questions of 'disambiguation'.
- The ORCID identifier was provided also to post-doctoral researchers and PhD students; in connection with *Loginmiur*, this allows a 'longitudinal' analysis of their careers with possible implications also for research assessment activities (e.g. of PhD students, currently not included in the periodic national research assessment exercise).

The IRIDE project: aligning *Loginmiur* with local and international databases (3)

- Overall the IRIDE project was a resounding success in its first phase, as ca. 98% of the researchers supposed to be involved in the project were actually provided with an ORCID (beforehand, only ca. 8% of those researchers possessed such an identifier).
- On the other hand, its second phase has never been fully implemented so that, as of now, a nationwide repository of scientific works, linking unambiguously each of them to its authors, does not still exist.

Loginmiur and the journal classification system

- The connection between *Loginmiur* and ORCID is also relevant for scholars of SSH, but less useful for research evaluation purposes as data from WoS and Scopus are not used for such purposes in the SSH.
- On the other hand, ANVUR maintains also an extensive two-tier classification of scientific journals; once applied to *Loginmiur* data, this classification makes it possible to ascertain if an author's contributions are published (or not) in such outlets;
- This information is then used for individual evaluations, although not for national-level research assessment exercises
- Loginmiur underpins ANVUR's journal classification system, if only because only journals included in Loginmiur can be included in the classification.
- This prerequisite is, however, more formal than substantial in nature. As new journals are added to the classification, ANVUR requests that they are included in *Loginmiur*, if they are not yet present in the database.

Loginmiur and the journal classification system

- Quality checks on the items admitted (or not) in the journal classification system are only enacted by ANVUR, as Loginmiur lacks exclusion criteria defining publications (or typologies) that are allowed and others that are not.
- Thus the journals included in the classification are, *de facto*, a subset of a wider database; this subset is the only one used for research evaluation purposes.
- From this standpoint, thus, the relationship between Loginmiur and the journal classification can be compared to that between CRISTIN and NVI in Norway
- However, the journal classification is not directly used to allocate resources; instead, it bears mainly on the recruitment and promotion of academics (as it affects one's chances of reaching the "minimum thresholds" of scientific qualification) and, albeit indirectly, on the accreditation of PhD courses.