# Why should I care for my reputation?

Fiesole Collection Development Retreat, April 7th 2016

Andrea Bonaccorsi

University of Pisa

RISE, European Commission- DG RTD

Former member of ANVUR, National Agency for the Evaluation of Universities and Research Institutes
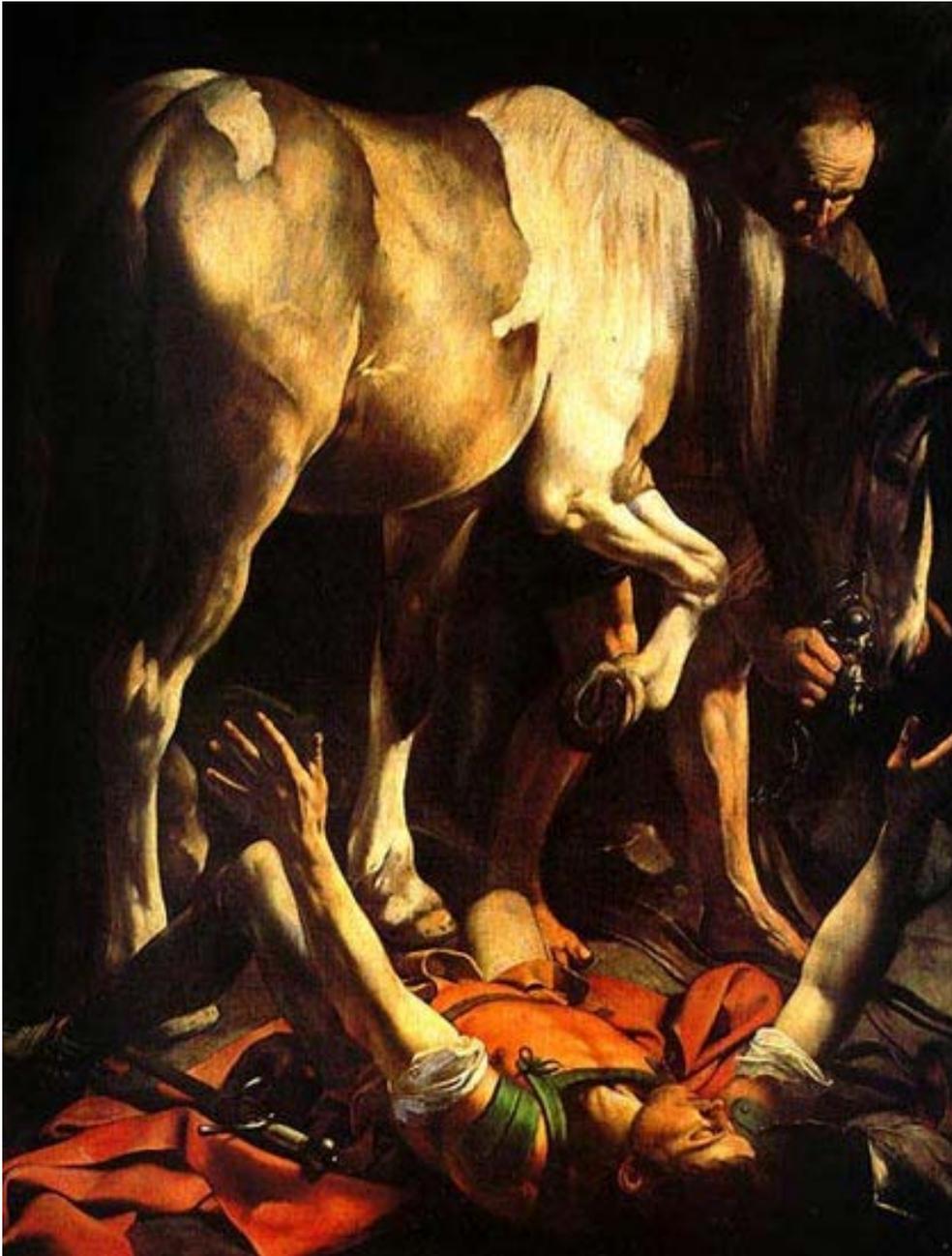
Caravaggio (1601)
*Conversion on the Way to Damascus*

# On the origins of reputation

In the academic domain, the reputation is established through the impact and quality of scientific research.

In hard sciences and technologies the reputation is <span style="color:red">directly related to the number and importance of citations received.</span>

Scientists routinely keep track of their individual indicators related to
- Number of citations
- Weighted number of citations

«An article is largely cited only if it is used by a large number of scientists» (Cronin, 2005). Few exceptions:
- Mathematics (= few articles per year, with few citations)
- «*sleeping beauties*» (van Raan, 2004) (= important discoveries that come to be cited only after many years)

# On the origins of reputation/2

In the SSH (with the exception of Economics and Psychology), on the contrary:

- Important role of books
    - books take more time to be produced
    - citations can take many years to grow
    - normalization of citations difficult
- Language
    - role of national language as research medium
    - multilinguism
- Audience
    - larger role for interaction with general public
    - critical junction between research in Humanities and cultural identities (history, language, literature, art)

Does this situation prevent a scientific analysis of knowledge production and of the formation of reputation in SSH?

# What we (already) know about publication patterns in SSH

- Citations are made to sources that are older (on average) (only 5-30% last five years)
- Citations are close to zero for a certain period after publication
- Good share of citations are to non-living authors

- Books are more important in scientific production (35-50% min)
- Books contain more citations
- Citations in books are more interdisciplinary
- Citations in books are to a larger typology of sources (e.g. dissertations, catalogues, archival material, fiches, cartography, images etc.)

- Citations cover a wider range of motivations than in hard science (rhetorical/argumentation functions)

# Open issues after the **Book Citation Index**

- Lack of standardization of references to edited books
- Lack of cumulative citation counts from different hierarchical levels
- Books as collection of (already published) articles
- New editions
- Posthumous co-authorship

Consequences
- Lack of normalization
- Citations from books and to books *cannot* be treated in the same way as citations from articles and to articles

«Citation processes of books have not yet been sufficiently studied» (Gorraiz, Purnel and Glanzel, 2013)

Open issues after **Publisher rating** (Spain)

- Large variability in quality of books and book series within the catalogues of publishers
- Business model of academic publishers
- Need to control for «halo effects» in reputation surveys
- Lack of empirical evidence about the correlation between publisher rating and peer review-based assessment of individual books
  - evidence available in the case of **journal rating**
    Bonaccorsi et al. (2015) *F1000*
    Ferrara and Bonaccorsi (2016) *Res Eval*

Consequences
- Difficult to utilize in research assessment

# What we need to know

## 1. Creative role of citations

In hard sciences citations are mandated by the cumulative nature of knowledge: authors are forced to quote state-of-the-art knowledge (and their authors) in order to substantiate the claim that their discoveries are original.

In Humanities (and in part of Social Sciences) citations are creative:
- citations establish a relation between an object and a field/author/issue previously unconnected with the object
- citations come in clusters, not isolated
- after new citations have been introduced, they need to be accepted by the scientific community
- after a time lag, they become standard

# Frequency of occurrence of the word «paradigm» in books in English



Thomas Kuhn (1962)
*The structure of scientific revo*lutions
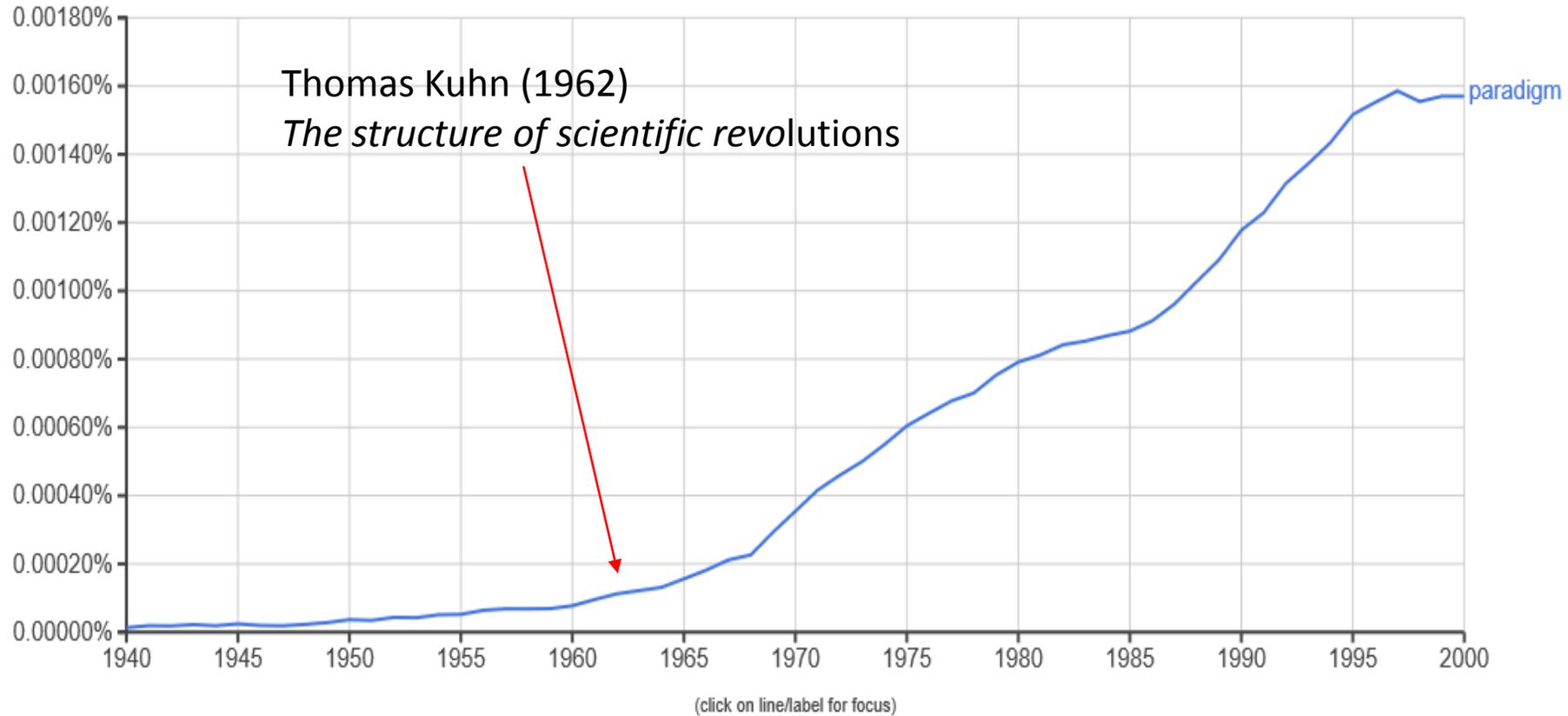
Source: elaboration from Google Ngram Viewer

# Frequency of occurrence of the word «tacitness» in books in English

Nelson- Winter (1982)
*An evolutionary theory of economic change*
introduce the notion of «tacit knowledge»

quoting Michael Polanyi (1958) *Personal knowledge*

tacitness
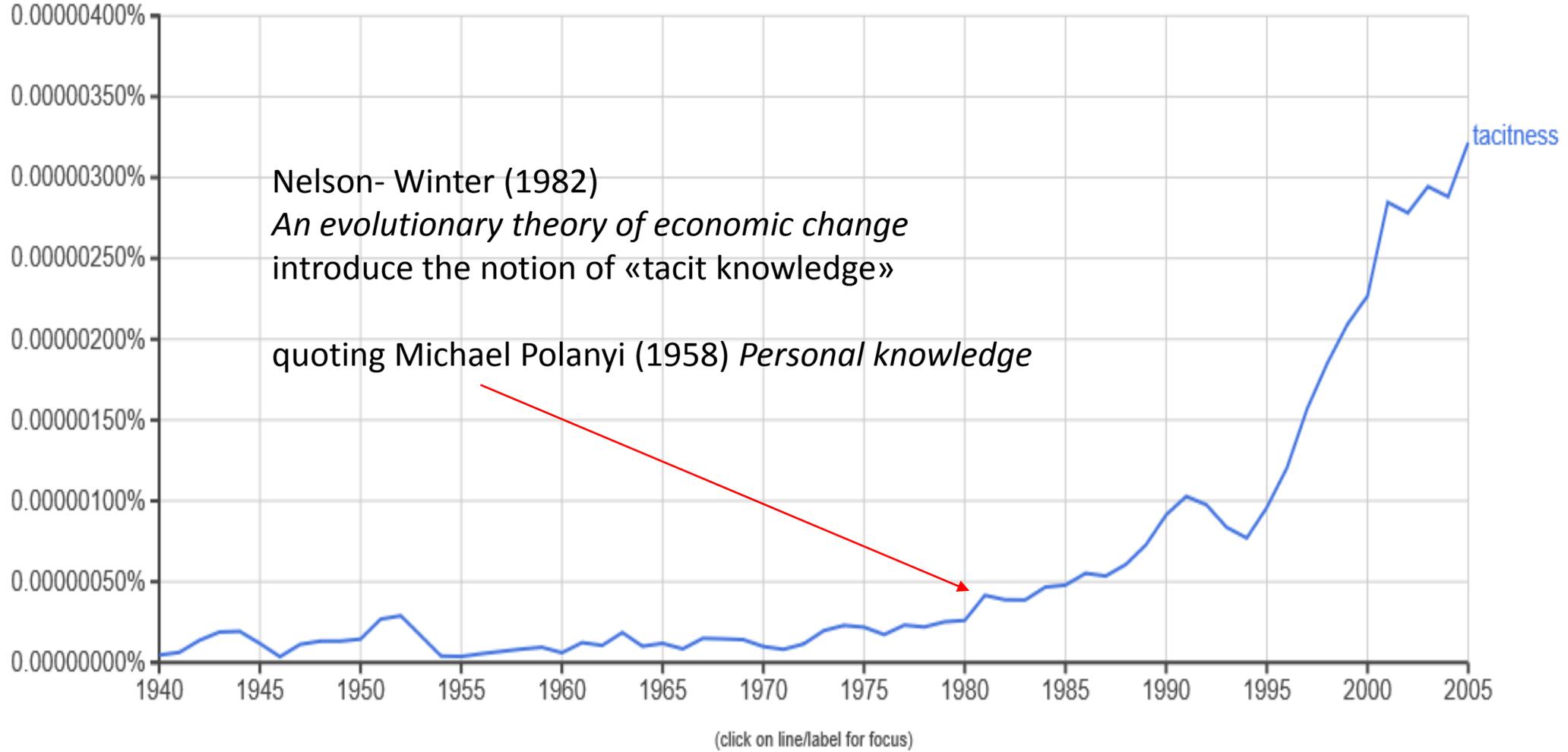
Source: elaboration from Google Ngram Viewer

Eduard Manet
*Le Déjuner sur l'erbe*
1862-63

*The judgment of Paris*
Marcantonio Raimondi (1515) after a drawing by Raphael

What we need to know

**2. Relation between volume and quality of publications**

The reputation in hard sciences is built upon the accumulation over time of citations from colleagues.
There is a (probabilistic) relation between the overall volume of scientific production and the citations received.

Do we see a similar relation for scholars in SSH?

Average number of book chapters and journal articles in the 2002-2012 decade **significantly differ** between those receiving the Habilitation and those not receiving it



Number of book chapters and articles in the 2002-2012 period

Candidates receiving the Habilitation

Candidates not receiving the Habilitation

Number of book chapters and articles

Scientific fields
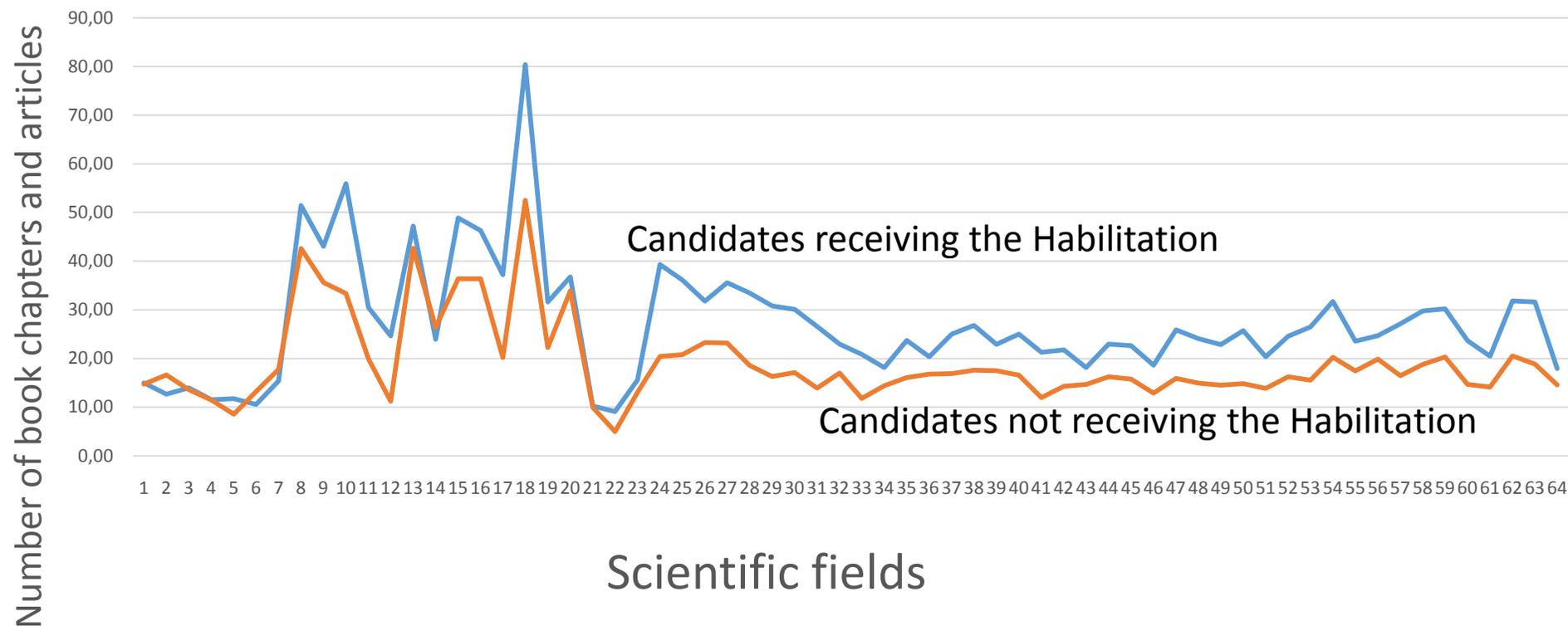
Source: elaboration from Bonaccorsi, Costantini and Setti (2016)

Average number of journal articles in A-rated journals in the 2002-2012 decade **significantly differ** between those receiving the Habilitation and those not receiving it



Number of articles in A-rated journals in the 2002-2012 period
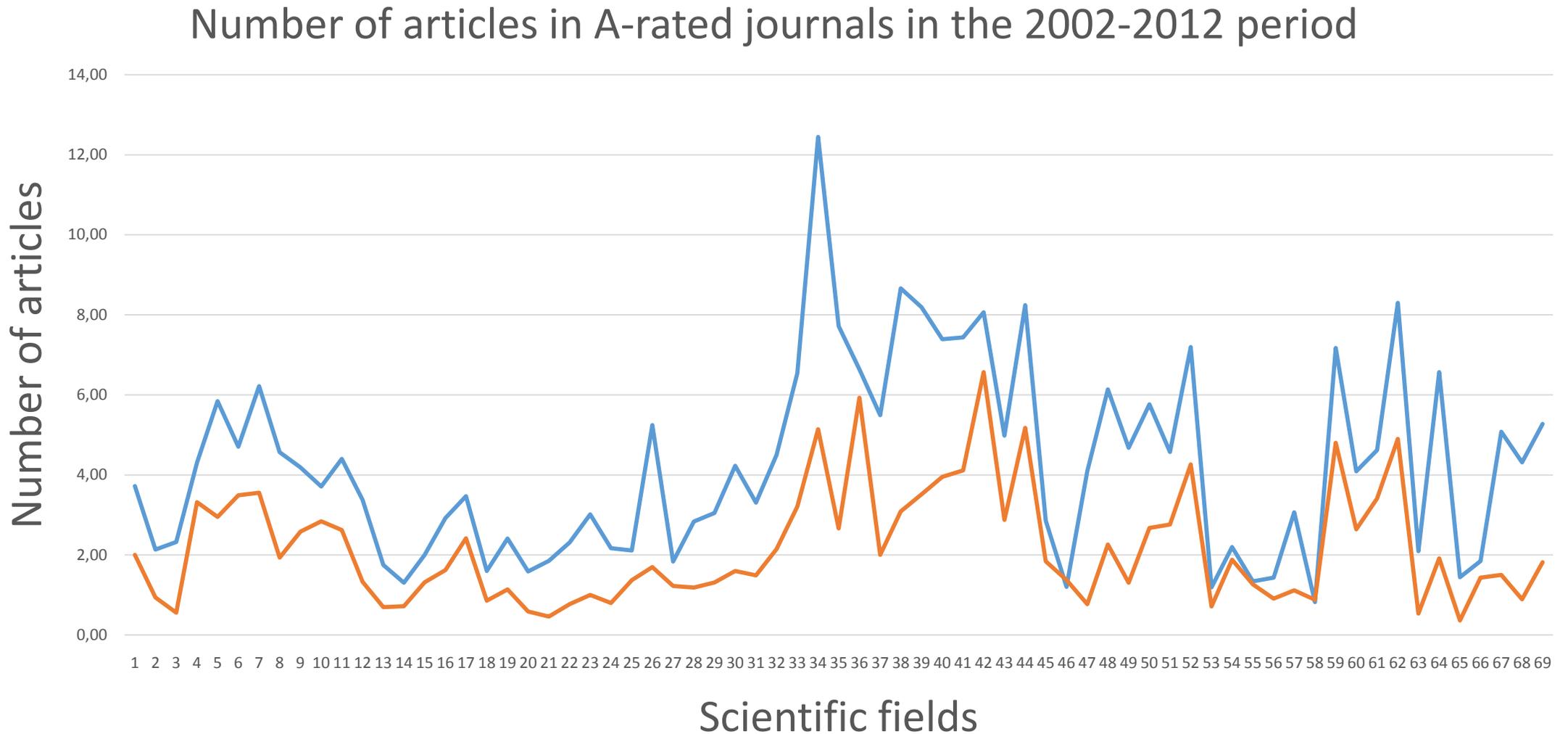
Average number of books in the 2002-2012 decade **does not differ** between those receiving the Habilitation and those not receiving it



Number of books in the 2002-2012 period
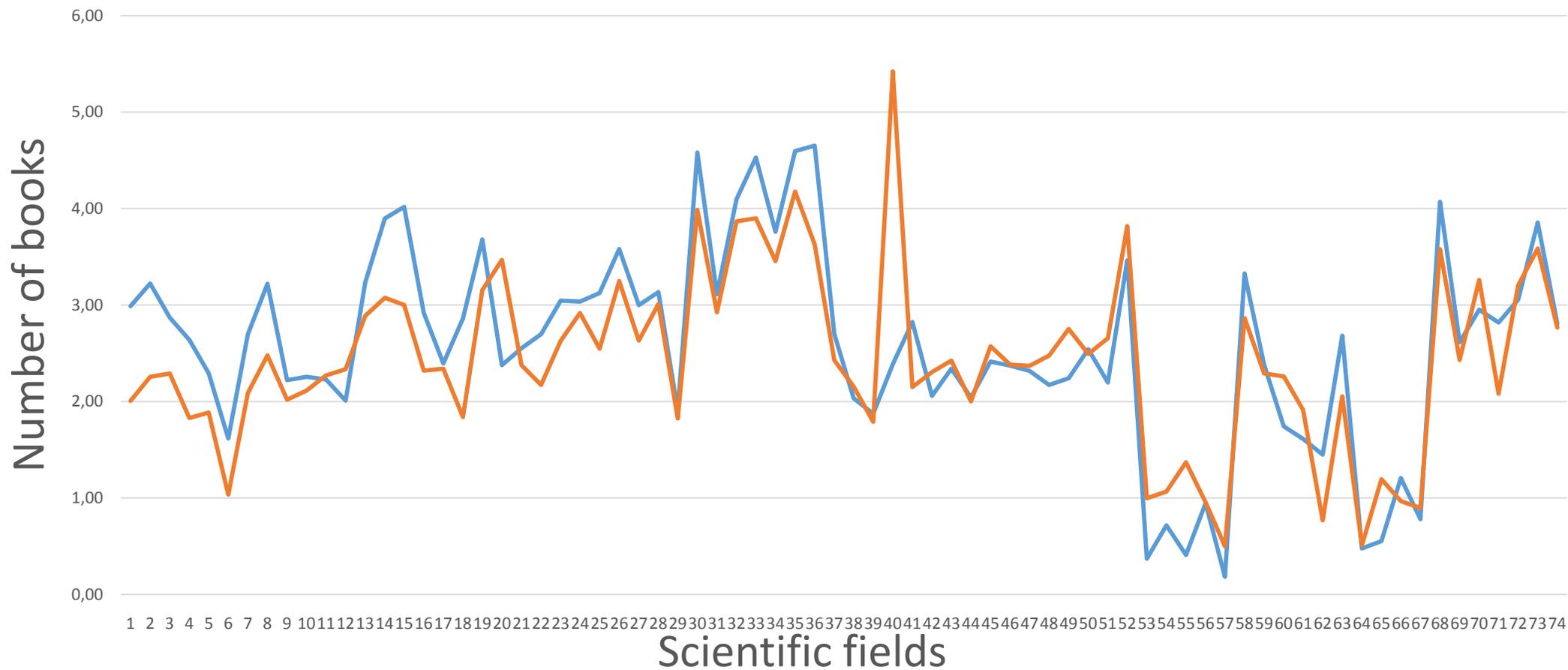
# What we need to know

3. Scientific communication before the publication

Books in SSH (mainly in the Anglosaxon context, much less in Europe) have an extensive introductory section of acknowledgments.

These reflect the extensive practice of submitting manuscripts, at various stages of maturity, to colleagues and friends for comments.

They also reflect the Anglosaxon practice of departmental seminars («brown bag» seminars), which are mandatory by tradition and are seldom missed by the faculty.

Reputation is created after acknowledgments received by established authors (Anthony Grafton).

What we need to know

4. Relation between academic reputation and social visibility

Scholars in SSH are more likely engaged in activities that make them visible not only to the scientific community but to the larger public.

With the advent of modern media and of social media the magnitude of the visibility that can be gained increased enormously.

Does social and media visibility add or subtract from academic reputation?
Is social and media visibility a complement or a substitute for academic reputation?

# What is the relation between academic reputation and social visibility?

**Theory of social judgment** (Alessandro Pizzorno, *Il velo della diversità. Studi su razionalità e riconoscimento*, Feltrinelli, 2007)
- reputation
- visibility

Tensions and conflicts between the two notions.

**Sociology of art**
(Monique Heinich, *De la visibilité,* Gallimard, 2012)
- building social visibility requires sustained effort
- strategic manoeuvering of presence/ absence
- management of scarcity
- active and daily management of opportunities
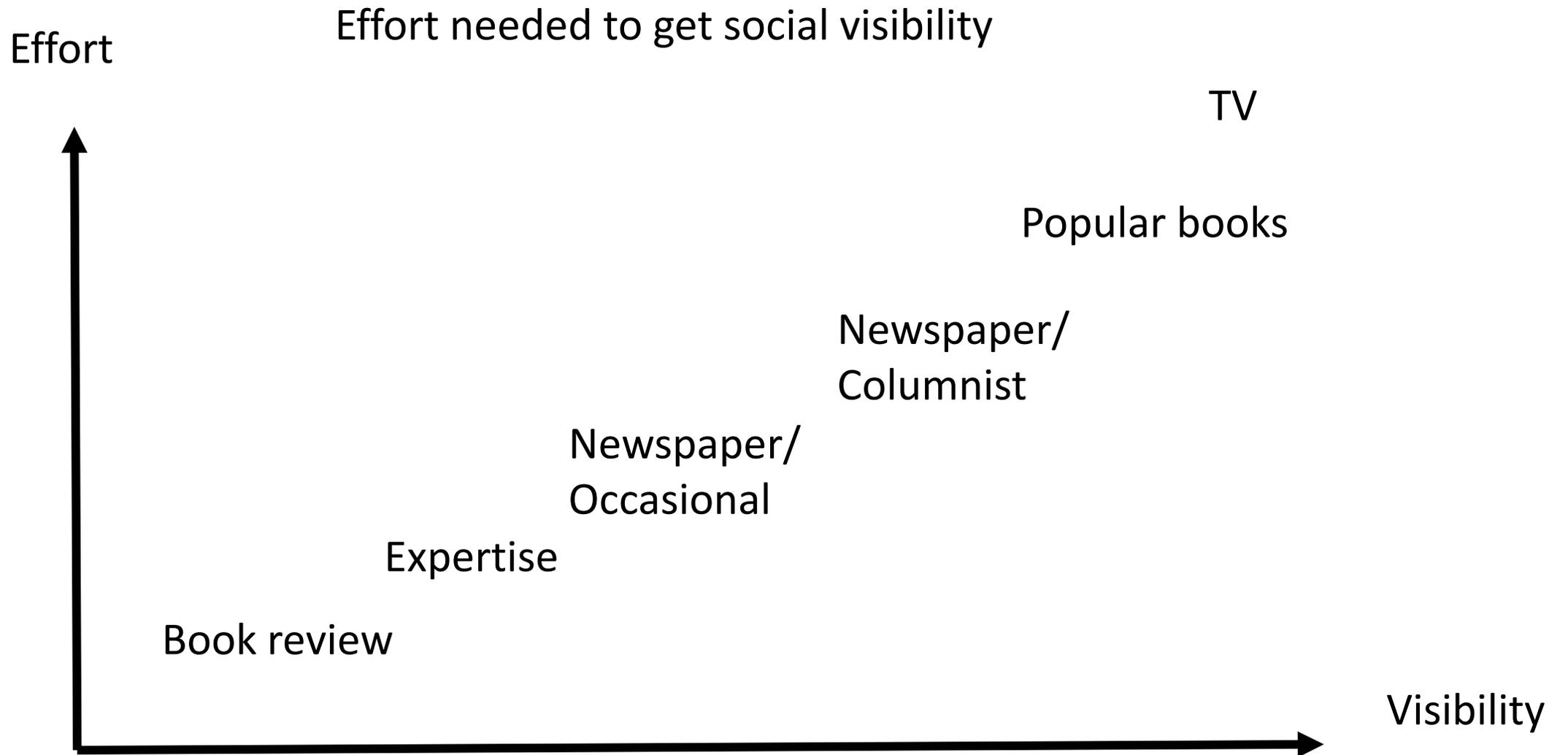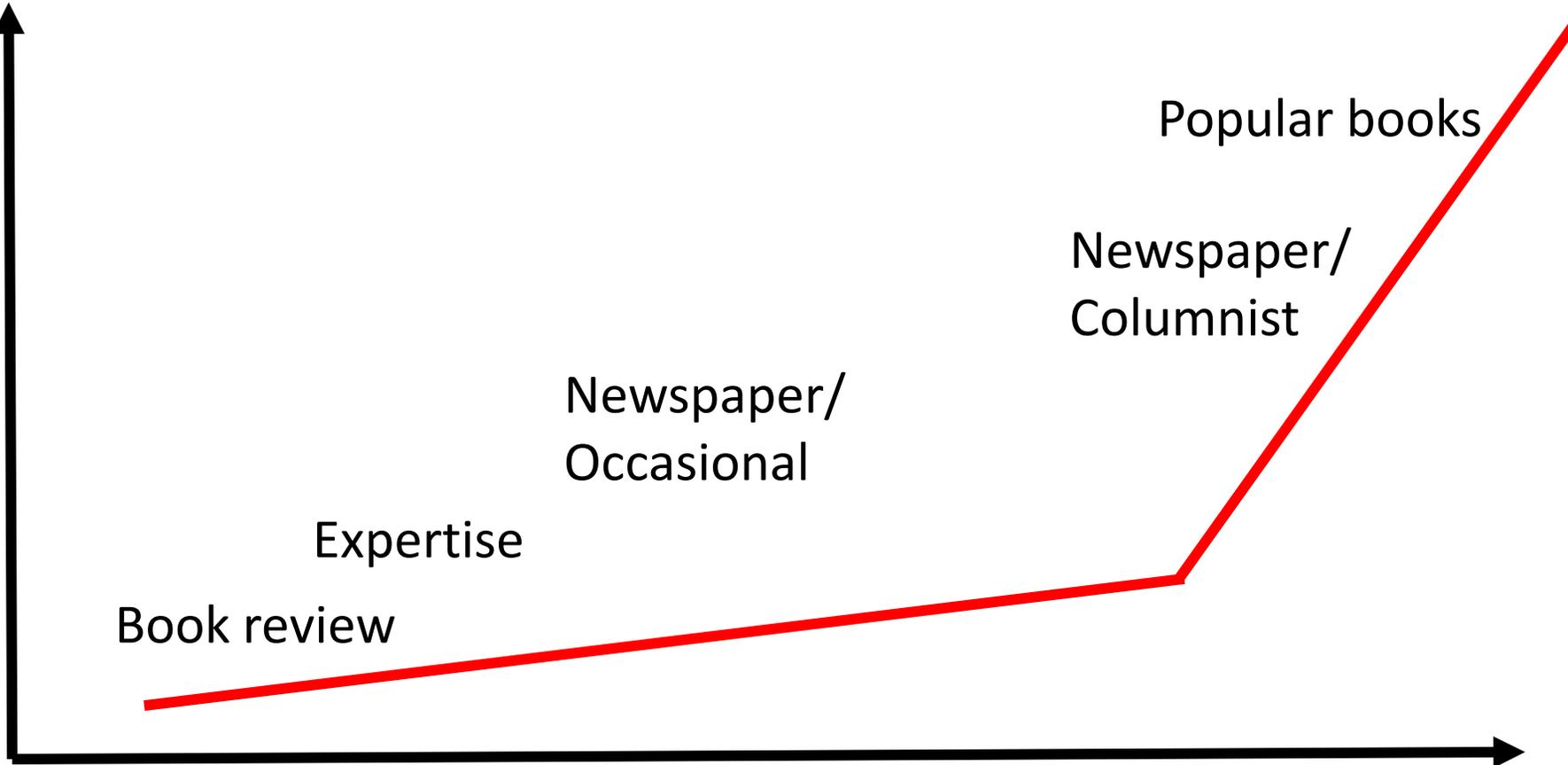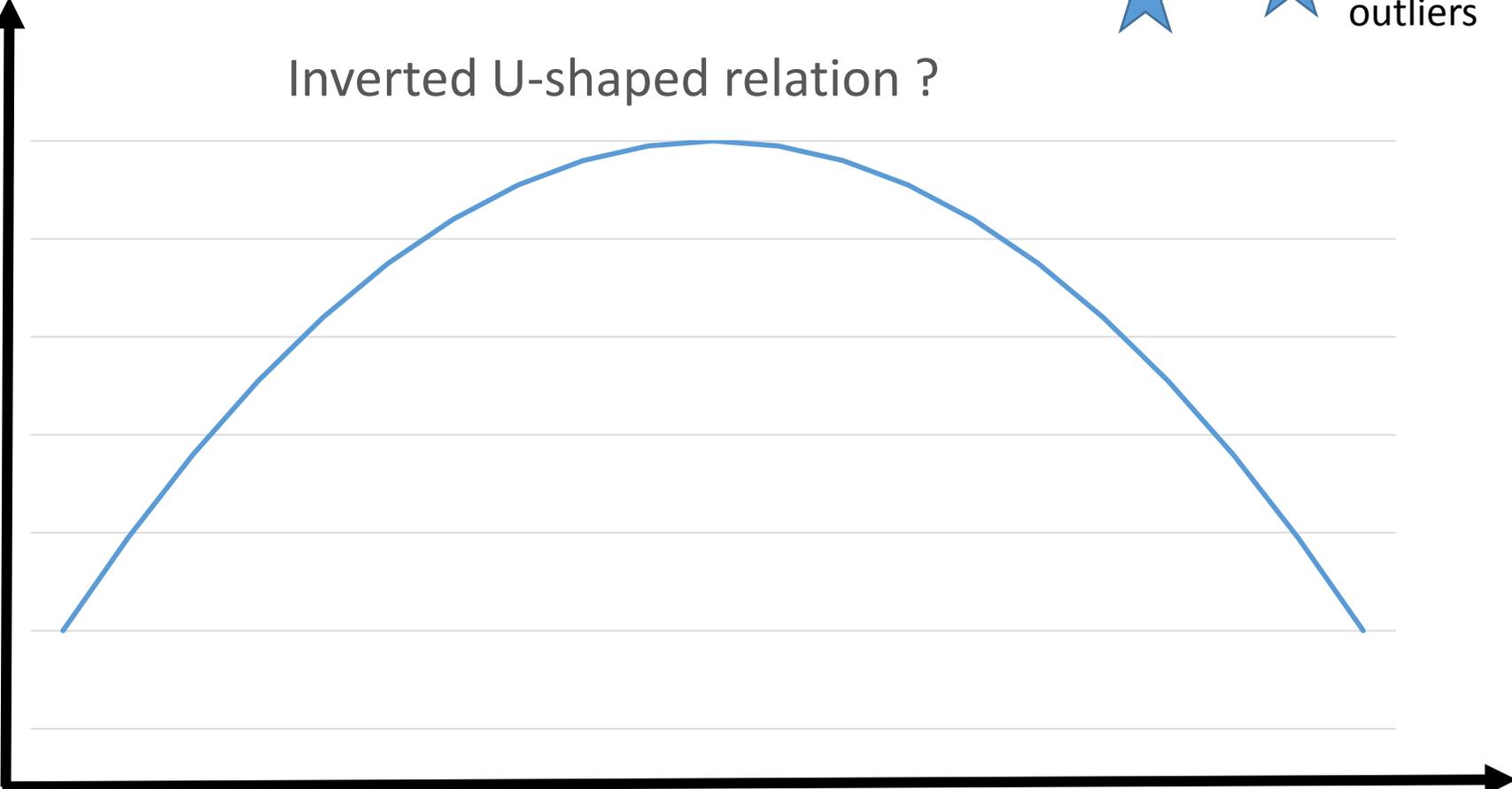
# What do we need to know

## 5. Potential of new indicators in SSH

### 5.1 Google Scholar
- Most studies compare GS with WoS and Scopus- they usually find GS has a larger coverage of SSH, lower (but rapidly improving) accuracy
- Need to compare GS data with data from peer review
- First studies in History and Sociology
  - Bonaccorsi, Ferrara & Ferrara (2016), *in preparation*

### 5.2 Altmetrics
- Need to compare systematically usage data with data from peer review

# What do we need to move forward

**A collection of scholarly books in digital format**
- At least two decades
- Several disciplines/fields
- Covering prominent authors
- Strict confidentiality agreement with publishers in order to prevent unauthorized circulation of texts

**Text mining of full text**
- Identification of citations (appr. 40 different modes of citations in books)
- Identifications of acknowledgments

**Bipartite graphs + dynamic networks**
- Network of citations
- Network of acknowledgments
- Comparison with crawling data on social visibility (newspapers, media)

Conclusions
**Towards a *science of science* in Humanities**

Risk of marginalization of research in Humanities

Need to build a robust argument for research in Humanities

    - not the usual argument about the economic impact in terms of turism, museums or cultural heritage

    - not the usual call for more money

    - but a full scale epistemological argument about <span style="color:red">the way in which valid scientific knowledge is produced in Humanities</span>

    - humans live by symbols- but symbols take a meaning only if there is historical continuity

    - preserving historical continuity requires research

    - without research in Humanities the ability to interpret meanings would be interrupted

Need to overcome the «fear of numbers» in SSH

## La valutazione possibile

Teoria e pratica nel mondo della ricerca

## Andrea Bonaccorsi

il Mulino   Studi e Ricerche

My book from Damascus….

In the book I have addressed a number of theoretical problems on the possibility of commonly agreed criteria of «research quality» in SSH.

At the same time I have entered into a deep discussion of epistemic problems in four areas:
-  History
-  Anthropology
-  English literature
-  Political science

Further work is under progress.