

ARTICLE, BOOK FORMAT, OR BOTH? SHARED CRITERIA ADOPTED FOR THE DOUBLE DOCTORAL THESIS FORMAT AND LANGUAGE IN A EUROPEAN/INTERNATIONAL JOINT NETWORKED PhD PROGRAM

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Abstract

The paper discusses the issue of the doctoral thesis format in the light of the current debate about the outcomes of the doctoral education and the changing scenario of the career prospects for the PhD holders both in and outside academic context.

Although – as stated in the EUA-CDE workshop “The outcomes of doctoral education” (Izmir, Turkey, 23-24 January 2013) call for paper - “only a small minority of doctorate holders have traditional research careers” and therefore “the definition of outcomes of doctoral education has become increasingly relevant”, “the doctoral degree is still obtained through rigorous research presented in the form of a thesis”.

At the same time there is a diffused trend to move from the traditional format of the thesis to the collection of articles to varying degrees according to the disciplines, countries and institutions. This trend is discussed enlightening the new assessment culture that skews evaluations towards approaches, which also in the social sciences are seen as more likely to fit with natural sciences. The progressive de-evaluation of the “book” format in favor of collection of articles is coherent with an academic culture that is more and more dominated by the quantification ethos of scientific output, assessed with bibliometric indicators. The competitive pressure to publication occurs in the changing scenario of the editorial world in the digital era and in a climate where new tools for disseminating knowledge are constrained by the impetus for fast and short communication, although scientists are well aware that thinking, creating, innovating and disseminating scientific knowledge is not just twitting.

Our contribution is aimed to share expertise and experience regarding form of the thesis adopted by an international joint doctoral programs. Leading since 1993 the European/International Joint Ph.D. in Social Representations and Communication (<http://www.euophd.eu>) - a training structure including 25 Universities in 10 EU and 6 extra-EU countries, 1 national research centre, 1 international company, 2 SMEs - has been not only a privileged arena to discuss, define and adopt shared criteria for the doctoral thesis (and its double book and article formats and language) in our Joint Doctorate, but it is also a top observatory of the changing practices ongoing in the doctoral research training in the various countries and institutions involved in the program.

Keywords: doctoral education, thesis format, international joint doctoral programs, bibliometric culture.

1 AIMS

This contribution is aimed:

- a) to discuss the issue of the doctoral thesis format in the light of the current debate about the outcomes of the doctoral education and the changing scenario of the career prospects for the PhD holders both outside and inside the academic context. This latter is more and more dominated by the bibliometric culture also within social sciences, and by the progressive de-evaluation of the “book” in favour of collection of “articles”;
- b) to share expertise and experience regarding the double format of the thesis (book and article) and the language policy adopted in a joint international doctoral program, characterised by the triple “iii” model: International, Intersectoral, Interdisciplinary.

2 THE PROGRESSIVE DE-EVALUATION OF THE “BOOK” FORMAT IN FAVOR OF COLLECTIONS OF ARTICLES WITHIN AN ACADEMIC SCENARIO DOMINATED BY THE BIBLIOMETRIC CULTURE

Although – as stated in the EUA-CDE workshop “*The outcomes of doctoral education*” (Izmir, Turkey, 23-24 January 2013) call for paper - “only a small minority of doctorate holders have traditional research careers” and therefore “the definition of outcomes of doctoral education has become increasingly relevant”, “the doctoral degree is still obtained through rigorous research presented in the form of a thesis”.

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Although currently Scopus-Elsevier and WoS start to cover - at different extent - also books and book chapters upon review of quality standard of publishing houses, and despite the big investment especially by Scopus in the field of humanities and social sciences, the sources based on books are still limited and often they cannot be selected by the academics when required to submit their best scientific outcomes to the evaluation agencies or committee, because the elements used by the algorithms do not comprise indicators based on “book” evaluation.

As previously underlined, the competitive pressure to publication occurs in the changing scenario of the editorial world in the digital era and in a climate where new tools for disseminating knowledge are constrained by the impetus for fast and short communication, although scientists are well aware that *thinking, creating, innovating and disseminating scientific knowledge* is not just *tweeting*. (de Rosa [2]).

Therefore it may be interesting to stimulate systematic investigations based on a meta-reflexive discussion and exchanges of views among the members of different scientific communities on their motivation for preferred publishing options and collaborative strategies in the current editorial and academic scenario, framing the phenomenon of the progressive de-evaluation of the “book” format in favor of collection of articles within an academic scenario dominated by the bibliometric culture. [2]).

Indeed a lively debate on the bibliometric culture - which has progressively dominated the quality evaluation system of the academic institutions and their members - still animates and divides the community of scientists and institutional leaders, differently affecting not only their personal careers but also their intergroup relations, and their personal, social and scientific identities, according to the discipline, the generational level, their paradigmatic, thematic and methodological options closer or outside the mainstream dominant in the respective disciplines.

In order to contextualise the controversial debate on the impact of bibliometrics on the academic culture of quality evaluation system and to understand the evolution of the bibliometric culture era, it may be useful to recall here a brief history of its development *from the Science Citation to Webometrics and beyond*, already outlined in a previous contribution (de Rosa [2]) [60] [61] [62] [63]).

Three indicators of the progressive development of the field of Informetrics can be identified in the organisation of series of biennial conferences and subsequent birth of international scientific association and of specialised journals:

- from the first 1st International Conference on Bibliometrics and Theoretical Aspects of Information Retrieval organised in Belgium in 1987 to *14th International Conference of the International Society for Scientometrics and Informetrics*. organised in 2013 in Austria scholars from all over the world met in different continents and countries (Canada, India, Germany, USA, Israel, Mexico, Australia, China, Sweden, Spain, Brazil, South Africa, to present their research and discuss the development of this new disciplinary field, (<http://www.issi-society.org/past.html>). As clearly mentioned on the website on examining the list of conferences and host countries, one may sees “that the idea of north-south/east-west distribution of conferences has been upheld, even if not to the letter of strict geography. This distribution of locations of the conferences gives opportunities for host countries to encourage and showcase scientometric and informetric research in their home institutions to an international audience.” (<http://www.issi-society.org/aboutconf.html>).

- The International Society for Informetrics and Scientometrics, ISSI (<http://issi-society.org/news.html>) was founded during the 4th International Conference on Bibliometrics, Informetrics and Scientometrics (held in Berlin, 11-15 September in 1993) and incorporated with formal **Articles of Association** in 1994 in the Netherlands (Utrecht) with Dr Hildrun Kretschmer elected as its first President. The International Society for Informetrics and Scientometrics, ISSI, is an association of professionals active in the emerging interdisciplinary fields of informetrics, bibliometrics/scientometrics, technometrics and webometrics. Among its membership are scientists from over 30 countries representing all five continents. The ISSI 's mission isto encourage communication and exchange of professional information in the field of scientometrics and informetrics, to improve standards, theory and practice in all areas of the discipline, to stimulate research, education and training, and to enhance the public perception of the discipline.
- Specific editorial tools, like the Journal of Informetrics (JOI) by Elsevier (<http://www.journals.elsevier.com/journal-of-informetrics/>) among others, have been created to publish research on quantitative aspects of information science with the main focus on topics in bibliometrics, scientometrics, webometrics, and altmetrics. Contributions studying informetric problems using methods from other quantitative fields, such as mathematics, statistics, computer science, economics and econometrics, operations research, and network science, are especially encouraged. JOI publishes both theoretical and empirical work. In general, case studies, for instance a bibliometric analysis focusing on a specific research field or a specific country, are not considered suitable for publication in JOI, unless they contain innovative methodological elements.

Reading the contribution of E. Garfield from 1955 [3] to 2006 [4] is very interesting to understand the evolution from the scope of *information retrieval* and *science citation* to a progressive application of *informetrics* for academic quality evaluation.

In 2009 De Bellis [5] in his book "*Bibliometrics and Citation Analysis: From the Science Citation Index to Cybermetrics*" starts from the observation that "since citation indexes came into the limelight during the mid-1960s, citation networks have become increasingly important for many different research fields." He begins by investigating the empirical, philosophical, and mathematical foundations of bibliometrics, including its beginnings with the Science Citation Index, the theoretical framework behind it, and its mathematical underpinnings. He then examines the application of bibliometrics and citation analysis in the sciences and science studies, especially the sociology of science and science policy. Finally, he provides a view of the future of bibliometrics, exploring in detail the ongoing extension of bibliometric methods to the structure and dynamics of the World Wide Web.

Recently published books and articles have furnished updated and more comprehensive overviews of theories, techniques, concepts, and applications in the interdisciplinary and steadily growing field of bibliometrics until its recent evolution from *Webometrics* to *Altmetrics*. The latter is based on the transactions of users in the new scenario of the Web 2.0 and the on-growing scenario of *social networking* of especial interest to scholars now undertaking large-scale migration to online publishing and moving toward a universe of web-native communication ([6], [7], [8], [9], [10], [11], [12], [13])

Blaise Cronin, professor of Information Science at Indiana Univ. Bloomington and author of *The Hand of Science: Academic Writing and Its Rewards* (2005) [14] and Cassidy Sugimoto, assistant professor in the School of Informatics and Computing at the same University, have edited a new book *Beyond Bibliometrics* (2014) [11], illustrating how bibliometrics has moved well beyond the mere tracking of bibliographic citations. The Web enables new ways to measure scholarly productivity and impact. It makes available tools and data that can reveal patterns of intellectual activity and impact that were previously invisible: mentions, acknowledgments, endorsements, downloads, recommendations, blog posts, tweets. Cronin and Sugimoto's book [11] examines a variety of alternative metrics – or "altmetrics" – while also considering the ethical and cultural consequences of relying on metrics to assess the quality of scholarship. The contributors to *Beyond Bibliometrics* discuss the changing environment of scholarly publishing, the effects of open access and Web 2.0 on novel analytical methods, and the emergence of next-generation metrics in a performance-conscious age.

Within the fast-growing, multidisciplinary field of bibliometrics, which ranges from webometrics to scientometrics to influmetrics, by providing real-time information, so-called "altmetrics" are changing the way in which research impact is understood. Jason Priem and Heather Piwowar (2012) [15] outline the launch of ImpactStory (<http://impactstory.it/>), a new open-source webapp intended to provide a broader picture of impact to help researchers tell data-driven stories about their broader

impacts. Instead of the Wall of Numbers, Priem and Piwowar [15] categorize the impacts along two dimensions: audience (scholars or the public) and type of engagement with research (view, discuss, save, cite, and recommend). Figured in each dimension is the author's percentile score compared to a baseline; in the case of articles, the baseline is "articles indexed in Web of Science that year." [15].

Some reasonable doubts about the use of social media in the research evaluation and the need to distinguish between authors' *social popularity* (based on opinion) and *scientific impact* (based on peer reviewed quality filter of scientific facts and results) have been in 2014 expressed by Moed [16] [17]. Also professionals devoted to Altmetrics company's mission recognise that "Altmetric allows authors and their institutions to see what people are saying about a scholarly paper and can tell them how much attention a paper is receiving relative to their peers", and therefore it is becoming an increasingly widespread tool for monitoring and reporting on the broader impact and dissemination of research, but it is not the tool to evaluate its content's scientific quality (Chimes, C. 2014) [12]. It is evident that the Open networked science scenario (Tapscott D. Williams A.D., 2008 [18]; Nielsen, M. 2012 [19]) and the progressive computerisation of the research process are modifying the research practices in the era of the Science 2.0. and this will not be irrelevant also for the evaluation of the science impact.

The exponential use of bibliometrics has raised questions which have generated a highly polarised debate about the relevance, actuality and legitimation of the use of informetrics for science knowledge and science policy.

The evolutionary scenario of the new bibliometric culture from *Science Citations* to *Scientometric* to *Altmetrics* is widely documented in a multi-disciplinary research field which has moved from information science, informatics, statistics, mathematics, technology, communication and new media studies, but which, due to asymmetric applications in the domain of social sciences and humanities compared natural and applied sciences, has crossed epistemological issues in the history of sciences and their disciplinary policies. It is evident that the competitive market logic has been a driving force in the development of *Informetrics* and complementary methodological apparatuses for benchmarking. This has been due to the strong commercial interests of publishing houses in positioning their journals in the bibliometric databases, so that authors are induced to identify methods of journal benchmarking.

Moskovkin, Bocharova and Balashova (2014) [20] have, for example, introduced and developed the methodology of journal benchmarking as an analytical procedure for continuously monitoring and comparing the advance of specific journal(s) against that of competing journals in the same subject area, together with the application of best practices defined in order to improve a journal's own advance and gain a position among leading scientific journals. As regards practical implications, the detailed journal scoreboard and prediction calculations make it possible to devise strategies and policies for the promotion of journals in the Web of Science and Scopus databases.

Since the application of bibliometric data started to be widely used for the measurement of university research performance (Moed, [21] [22] [23]) (with major consequences in many sectors of resource distribution, from research funds to human resources allocation and career promotion), the competition has been extended from journals and their publishing houses to academic and research institutions, giving rise to a multiplication of external ranking agencies and internal assessment committees dealing with the evaluative process at local, national and international level. They are increasingly the targets of several ranking systems and institutional benchmarking, even orienting ministerial policies at governmental country level (sometime in collaboration with spin-offs originated by the publishing houses themselves). When the application of bibliometric data has been mis-used, *wealth competition* has often degenerated into *insane conflicts* "within" and "between" research departments, scientific communities, and different disciplinary affiliations to produce "*bad practices*" (like writing and publishing more than reading; mutually exchanging author's quotations and even author's signatures to increase the number of citations or individual publications; collaborating instrumentally rather than genuinely sharing scientific interests; devaluing book production in favour of articles in indexed journals, etc.).

If from one side an increase in papers authored by an extremely large number of researchers, is strictly related to the nature of the collaborative scientific outputs (like in the *ATLAS* collaboration papers published in 2008 with 2,926 authors and in 2012 with 3,171 authors; or in the *Nature* article on the Initial Sequencing and Analysis of the Human Genome by the *International Human Genome Sequencing Consortium* with about 2,900 authors published in 2009); in other fields the phenomenon of an impressive increased number of co-authorship (compared to single author paper) may also reflect the increased pressure "*to publish or to perish*" on the researchers for their academic career.

In order to answer the questions if individual researchers actually write more articles every year or more authors write more collaboratively, Plume and van Weijen [24] have checked different characteristics of authorship patterns over time on trend data from Scopus for 2003 – 2013 based on the count of articles, reviews and conference papers published each year and the count of authorships and unique author names associated with these. Results show that: a) there has been a consistent growth in the number of articles published over the past decade (from 1.3 million in 2003 to 2.4 million in 2013); b) the number of authorships (defined as the occurrence of an individual on an article) has increased at a far greater rate from 4.6 million in 2003 to 10 million in 2013; c) the number of authorships per unique author (defined as individual who has appeared on one or more articles in a given period or single year) has increased (2.31 in 2013); d) at the same time, the number of articles per unique author has declined (0.56 in 2013), while the total number of articles published per year has increased; e) the percentage of single authored papers has declined from 20% in 2003 to 13% in 2013, while in the same decade (2003-2013) the average number of authorship per article has increased from 3.5 to 4.15 authors.

Plume and van Weije [24] do not attribute this trend to “bad practices”, but interpret the rise of ‘fractional authorship’ or fractional contributions to papers, as the way in which authors manage more wisely their capacity to achieve productive results, by becoming more collaborative. “A given author may achieve this output by appearing as ninth author on 5 different paper (5 x 0.1 authorships per paper), instead of co-authoring as second author on a pair of 4-author papers per year (2 x 0.25 authorships per paper).” For those who believe that the academic imperative “to publish or to perish” should be at least integrated by “provided that to publish is worth!” this accounting logic of the academic work is indeed quite alien.

In order to detect “bad practices” (instrumentally goal-oriented) and to distinguish them from the “good practices” and trends that affect the dynamics of science production and diffusion (like, for example, the increase of inter-institutional and international collaborations, the creation of joint lab, the open science scenario, etc.), more observational and empirical researches on the publishing practices adopted by the authors belonging to different scientist’s disciplinary communities are needed. Moed [16] [17] has shown empirical evidence that - even within the so called domain of humanities and social sciences - differences exist not only among various disciplines, but even within the same discipline (for example between experimental psychology and social psychology) regarding the number of authors for article and regarding the practice of author’s citations versus full text downloaded by the readers. These analyses should be based both on field studies, on top exemplary case studies and on big data about the changes of publishing strategies especially in the scenario of fast systemic change in science 2.0. with its opportunities and threats: the growth of authorship, the explosion of publication and the availability of data Burgelman, Osimo and Bogdanowicz [25] [69-73].

The *controversial nature of the debate on the impact of the bibliometric culture on the academic culture of research evaluation*, from both the institutional and individual perspectives, has produced a rich body of literature on the *uses and abuses* of bibliometric tools and their application in diverse disciplines: [26] [27] [28] [21] [16] [17] [29] [30] [31] [32] [33] [34] [35] [36] [37] [38] [39] [40] [41] [42] [5] [9] [43] [44] [45] [46] [47].

Among the critical voices, Molinié and Bodenhausen [36] in ‘*Bibliometrics as Weapons of Mass Citation*’, appealed to scientists of all countries and disciplines to unite against the tyranny of bibliometrics, arguing in favour of a return to the values of ‘real science’, in analogy with the return to a ‘real economy’. Welcoming the appeal to unite against the tyranny of bibliometrics, the Nobel Prize-winner for chemistry Richard Ernst [37] has denounced “*The follies of citation indices and academic ranking lists*”: “The present hype of bibliometry made it plainly obvious that judging the quality of science publications and science projects by bibliometric measures alone is inadequate, and reflects the inadequacy of science management regimes staffed by non-scientific administrators or by pseudo-scientists who failed to develop their own personal judgment. Today, an erroneous conviction prevails that institutions and individuals of ‘value’ can be measured ultimately in terms of a single number that may form part of a competitive ‘ranking list!’” (Ernst, R. 2010) [37] As a final plea, Ernst’s personal wish as an author “remains to send all bibliometrics and its diligent servants to the darkest omnivoric black hole that is known in the entire universe, in order to liberate academia forever from this pestilence” (Ernst, R. 2010: 90) [37].

Critical remarks on the bibliometric reductionism are not exclusive to scientists who share Ernst’s view; they are also expressed by well-informed and reputable experts in this field. “The bibliometric reductionism is one of the many forms in which it is manifested in the course of the history of science, the search for absolutes in the areas governed by uncertainty and complexity. It is not only a

requirement speculative. Used uncritically, the bibliometric indicators can provide deadly weapon rhetoric to legitimize political decisions already taken on the basis of criteria that have nothing to do with the fairness of judgment” (De Bellis, N. 2014: 18-9 [9])

Indeed, critical voices are not new if we return to positions taken up by Seglen [26] twenty years ago: “the journal cannot in any way be taken as representative of the article. Even if it could, the journal impact factor would still be far from being a quality indicator: citation impact is primarily a measure of scientific utility rather than of scientific quality, and authors' selection of references is subject to strong biases unrelated to quality. For evaluation of scientific quality, there seems to be no alternative to qualified experts reading the publications. Much can be done, however, to improve and standardise the principles, procedures, and criteria used in evaluation, and the scientific community would be well served if efforts could be concentrated on this rather than on developing ever more sophisticated versions of basically useless indicators. In the words of Sidney Brenner, “What matters absolutely is the scientific content of a paper, and nothing will substitute for either knowing or reading it.”

Recently Moed [16] [17] has, for example, stressed how the citations in social sciences are influenced by fashion trends for political ideologies, showing on the basis of empirical data the decline of the citations to Marx and Lenin, which has become extremely evident after the fall of the Berlin wall.

One of the most recent critical views of the quality evaluation culture based on metrics has been expressed in 2015 by the *Higher Education Funding Council for England HEFCE* in the report “*Metrics cannot replace peer review in the next REF*” [59]. Based on the findings of the Independent Review of the Role of Metrics in Research Assessment and Management, the report concludes that ‘no set of numbers is likely to be able to capture the nuanced judgments that the REF (Research Excellence Framework) process currently provides’, and that it is not currently feasible to assess research outputs or impacts in the REF using quantitative indicators alone.” These conclusions are based on 15 months of evidence-gathering and consultation, including the most comprehensive analysis to date of the correlation between REF scores at the paper-by-author level and a set of 15 bibliometrics and altmetrics, undertaken by HEFCE with data provided by Elsevier. This analysis covered 149,670 individual outputs, and found only weak correlations between REF scores and individual metrics, significantly lower correlations for more recently published works, and highly variable coverage of metrics across subject areas. The analysis concludes that that no metric can currently provide a like-for-like replacement for REF peer review. Professor James Wilsdon, who chaired the review, said:

“Metrics touch a raw nerve in the research community. It’s right to be excited about the potential of new sources of data, which can give us a more detailed picture of the qualities and impacts of research than ever before. But there are also real concerns about harmful uses of metrics such as journal impact factors, h-indices and grant income targets. A lot of the things we value most in academic culture resist simple quantification, and individual indicators can struggle to do justice to the richness and diversity of our research.” (http://www.hefce.ac.uk/news/newsarchive/2015/Name_104464.en.html) [59]

In our opinion, *the impact of the bibliometric culture on the academic quality evaluation system* has not yet been adequately examined on the basis of systematic investigation and more research are needed on research practices and the interaction with the adoption of the bibliometric tools for research evaluations in different disciplinary areas, also taking into account that the history of science almost coincides with history of natural science and that social sciences and humanities are widely disregarded. The academics’ attitudes continues to be permeated by ideological pre-options, biased by advantage in valorising/devaluing the bibliometric indexes to measure own scientific quality.

Indeed the emulation of the publishing strategies popular in the natural science by the authors belonging to social sciences induced by the impact on their career of the diffusion of the bibliometric evaluation culture has been object of investigations and critical analyses conducted in different European countries (Netherlands, Switzerland, Germany, UK, France, Denmark, Spain) presented in 2014 by Thed Van Leeuwen [43], by Nigel Vincent [44], by Jochen Glaser [45], by Alessia Zuccala [46], Sven and Michael Ochsner [55], by Ioana Galteron and Geoffrey Williams [56], and a stimulus for defining indicators for SSH ‘s book publishers by Elena Gimenez Toledo [57].

Also for well-reputed informetrician Moed “more research is needed into communication, publication and citation and evaluation practices in Social Sciences and Humanities (a “science of SSH”)” [17].

3 THE DOUBLE FORMAT OF THE THESIS (BOOK AND ARTICLE) AND ITS LANGUAGE AS POLICY ADOPTED IN A JOINT INTERNATIONAL NETWORKED DOCTORATE.

Leading since 1993 the European/International joint networked Ph.D. program in Social Representations and Communication has been not only a privileged arena to discuss, define and adopt shared criteria for the doctoral thesis (and its double book and article formats and language policy) in our Joint International Doctorate, but also a top observatory of the changing practices ongoing in the doctoral research training in the various countries and institutions involved in the program and to monitor their change over a time period of more than 20 years (see de Rosa [48] [49] [50] [51] [52] [53] [54]). Below summarised the policy adopted for the double doctoral thesis format/language.

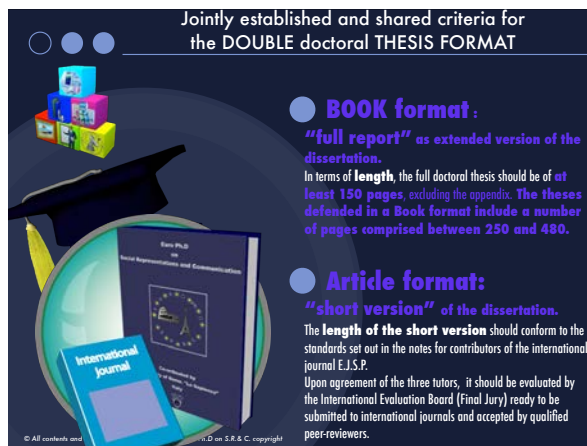


Fig. 1. The shared criteria for the double doctoral thesis format (book and article) jointly established and implemented by the European/International Joint PhD in Social Representations and Communication since 1996.

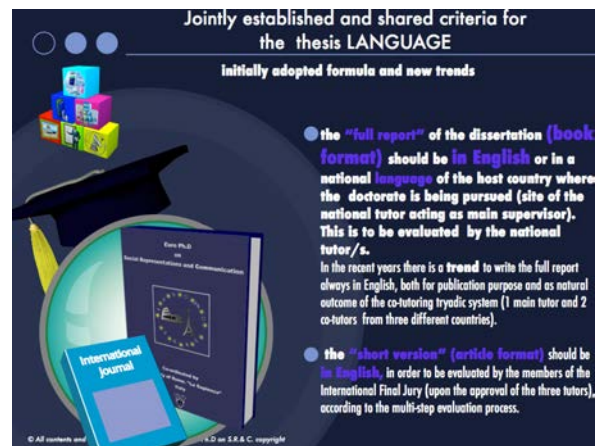


Fig. 2. The shared criteria for the LANGUAGE of the double doctoral thesis format jointly established and implemented by the European/International Joint PhD in Social Representations and Communication since 1996.

Driven by the responsibility for the future academic careers of the early stage researchers enrolled in our *European/International Joint PhD*, we critically inform them about the academic scenario dominated by the bibliometric culture and therefore about infometric tools, their use and misuse. This informational commitment entails stimulating their awareness of the “*impact of the impact*” produced by the bibliometric culture not only at institutional level on the academic quality evaluation system, but also specifically in our scientific field through empirical research program aimed at the use of big-data and meta-data from the *So.Re.Com A.S. de Rosa @-Library* for geo-mapping the social representation theory’s diffusion over the world and its bibliometric impact ([2] [60] [61] [62] [63])

By developing awareness about the “*impact of the impact*” not only generically, but specifically in our scientific field, we offer tools to the future researchers to choose strategically “*where*” and “*how*” they may successfully publish, also depending on the paradigmatic, methodological, thematic options.

However, we pursue this commitment in view of developing and disseminating a scientific field born more than 50 years ago, starting from the Opera Prima of Serge Moscovici [66] [67] [68] [50] [2] [64]:

- without diminishing a critical attitude in deciding “*if*” or “*when*” to publish and without dismissing interest in “*what*”, for “*what purpose*” to publish (accordingly revising the academic motto “*Publish or Perish*” by adding “*only on the condition that it is worth it!*”);
- without devaluing the importance of multiple formats for knowledge dissemination (not only articles, but also books and multi-media and new media-based tools).
- without decreasing the interest in “*reading publications instead of merely rating them by counting citations!*” or in originality and innovation in knowledge discovery and dissemination instead of the scientist’s bias towards cloning mainstream material under the pressure to publish.

Fanelli (2010) [38], on the basis of an empirical investigation carried out in the USA, concluded: “The growing competition and “publish or perish” culture in academia might conflict with the objectivity and

integrity of research, because it forces scientists to produce “publishable” results at all costs. Papers are less likely to be published and to be cited if they report “negative” results (results that fail to support the tested hypothesis). Therefore, if publication pressures increase scientific bias, the frequency of “positive” results in the literature should be higher in the more competitive and “productive” academic environments. This study verified this hypothesis by measuring the frequency of positive results in a large random sample of papers with a corresponding author based in the US.”

On the perverse effect of the confirmatory publishing strategy as depending on the competitiveness of science and careerism which encourages exaggeration and the cherry-picking of results, it is interesting to read *The Economist*, Oct 19th 2013, *How Science goes wrong. Scientific research has changed the world. Now it needs to change itself.* [65]

In this spirit we dedicate some of the sessions of the training events of the *European/International Joint PhD in Social Representations and Communication* to “*Writing skills and publishing policies*”, disseminating knowledge about bibliometric tools (“*when, why and how do you use them*”) increasing the odds of being published in the current scenario, and about the debate on metrics and non-metrics approaches to the evaluation of scientific products. This topic has become a regular part of training in transferable skills, especially of the *yearly Winter Session of the International Lab Meetings* and also of other training coordinating meetings, aimed at periodically monitoring the ESR’s progress on the *Meta-Theoretical Analysis*: <http://www.europhd.eu/IntLabMeetings>

The spirit that animates our interest in considering the “*impact of the impact*” is coherent with the *opinion piece for the Bulletin of the European Association of Social Psychology*, written together with other internationally recognized social psychologists convened in a small meeting in Lausanne (June 12-14, 2013) to reflect on the new conformism dominating research practices in social psychology and to launch debate within the European Association of Social Psychology (EASP) [70]. It states:

“(…) excellence and quality seem increasingly equated with scientism resulting in publications of brief research reports and the use of limited criteria for deciding about careers, prestige and funding. Scientific quality is critical for the viability of any discipline and for making an informed and responsible contribution to societal debates. But the sole emphasis on number of publications, impact factors, H-index and the like, contributes to an unwelcome homogenisation of the field in general, and of European social psychology in particular. Is this why European researchers prefer to publish in American journals? Why the impact factor of the EJSP remains quite low despite high rejection rates? Why American journals are more diverse? This quantification ethos of our discipline undermines risky and potentially innovative work as well as the use of a broader range of knowledge dissemination and publication channels. To recognize and assess research ideas, proposals, papers, and other types of output, a relevant social psychology needs a workable set of diversified and balanced criteria that includes the active dissemination and use of the knowledge produced.” [58]

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