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EDITORIAL

LOOKING BACK WITH A HEAVY HEART

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At times we resume our tradition of looking back at the most important events and developments related to our community that happened a year or two ago. This time we do this with mixed feelings, even with a rather heavy heart. On one hand, we can repeatedly report success stories such as the continuing growth of our scientific community mirrored by the growth of the membership of our Society associated with the growing acceptance of scientometrics/informetrics outside our community. The piece by Glänzel & Chi (2023) in this Newsletter issue (p. 8–11) may just give an example for this. In the previous issues of the Newsletter, we could also report about successfully organised international conference workshops, which could be held despite the challenge of the COVID-19

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pandemic. But these positive developments are unfortunately overshadowed by severe losses to our community. And so again, we had mourned the death of great pioneers and leaders of our field, esteemed colleagues and friends.

After we had the sad duty to report the passing away of Henk Moed (1951-2021) in October 2021 (ISSI Newsletter, 21 (4), 2021, p. 62-64), we also had to say good-bye to Donald deB. Beaver (1936-2022), who passed away in February last year at age of 85. Donald was member of the Williams College Faculty and was renowned for his work in the history of science, but joined also the scientometrics community as early as in the 1960s and 1970s with his famous studies of collaboration in science (jointly with Price and Rosen). The community considered him one of the fathers of collaboration studies, but he dealt with many other topics as well. In the present millennium, he joined the CollNet network and played an active part in this community until his retirement in 2016.

In the last 2022 issue we had to publish the obituary for Tibor Braun (1932-2022), the founder of the international scientific journal *Scientometrics* and one of the last polymaths in the field of scientometrics (ISSI Newsletter, 18 (3-4), 2022, p. 34-35).

Just some weeks ago, we received the sad news that Loet Leydesdorff (1948-2023) passed away in March 2023. In this issue too, we will commemorate life and work of this world-renowned scholar and outstanding member of our community. An obituary is part of this Newsletter issue and can be found on p. 3-4.

Despite introducing this first 2023 issue on a sad note, we have also the opportunity to briefly report on new community events and scientific results in this issue as well. And there is another comfort: After nearly two-year pandemic lock-downs, we got the opportunity to meet and travel again so that we are looking forward to meeting each other in person at the upcoming ISSI Conference in Bloomington in July 2023.

IN MEMORIAM

LOET LEYDESORFF (1948–2023)

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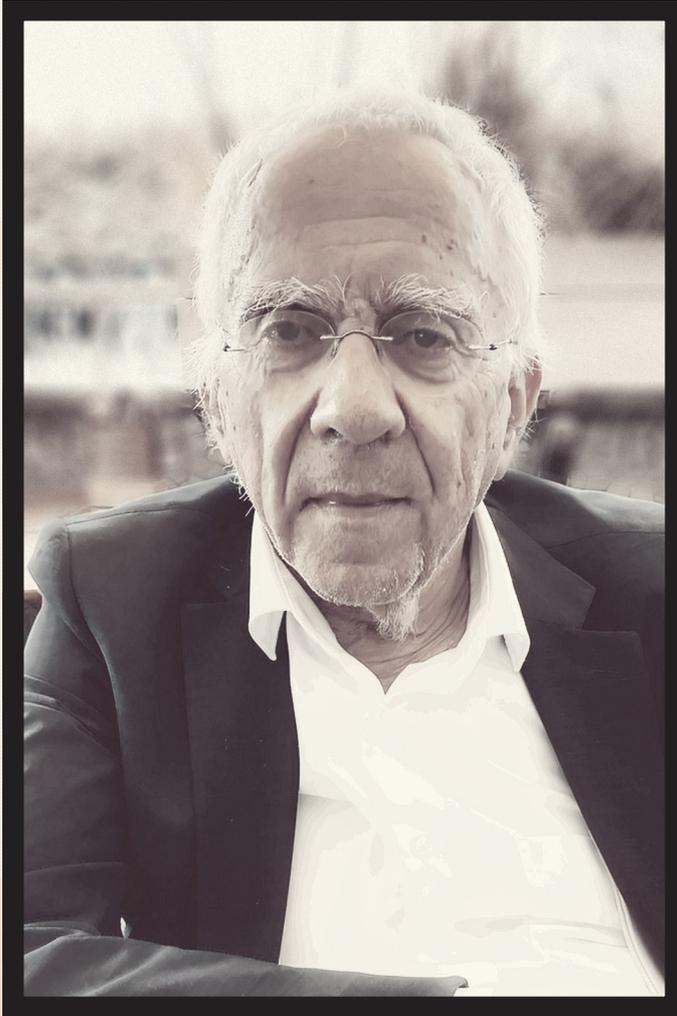
A towering intellect combining knowledge from a huge variety of scientific fields, Loet Leydesdorff developed a unique approach in which he combined communication and information theory and empirical philosophy of science with a keen interest in innovation and measurement. His research programme, which he summarized near the end of his career in the open-access publication “The Evolutionary Dynamics of Discursive Knowledge” (Leydesdorff 2021), consisted of three themes: 1) the dynamics of science, technology, and innovation; 2) the scientometric operationalization and measurement of these dynamics; and 3) the Triple Helix of university-industry-government relationships. He was a distinguished scholar, teacher, and professor at the University of Amsterdam, renowned for his groundbreaking research.

Born on 21 August 1948 in Jakarta (Indonesia), Leydesdorff studied chemistry

(1969), biochemistry (1972), and philosophy (1977). In 1972, he started as a teaching assistant at the University of Amsterdam and obtained his Ph.D. in sociology in 1984. He went on to become a professor at the University of Amsterdam, where he worked tirelessly for more than three decades. He was also a prolific author and researcher, publishing more than 900 articles and books that have had a significant impact on the fields of communication and scientometrics, including “The Challenge of Scientometrics,” (Leydesdorff 1995; 2001).

Leydesdorff’s work stands out for its novel interdisciplinary approaches, using tools and methods from a variety of fields to gain insights into complex systems. He was a pioneer in the use of network analysis to study scientific communication, and his work on the “Triple Helix” model of innovation together with Henry Etzkowitz has had a seminal and lasting impact on both innovation

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studies and government and university policies. His work in communications theory has advanced measures of uncertainty. Leydesdorff was an admirer of the work of Niklas Luhmann and Claude Shannon whose work he advanced in numerous ways, based on his thorough understanding of the philosophy and sociology of science (e.g., Habermas, Husserl, Popper, Schutz) and of self-organization theory (Maturana, Varela, von Foerster). A key contribution of Leydesdorff was the combination of these theories with a mathematically grounded theory of measurement.

Throughout his career, Leydesdorff was recognized for his contributions to the field of communications sciences and scientometrics. He received numerous awards and honors, including the Derek John de Solla Price memorial award (2003), and the Award of Merit from the American Society

for Information Science and Technology for his outstanding contributions to the field of information science (2016).

In addition to his many accomplishments, Leydesdorff remained deeply humble and approachable, always willing to share his knowledge and expertise with colleagues and students alike. Google Scholar registers more than a hundred co-authors, but his influence reached much wider through his tireless participation in hundreds of conferences, seminars, and his generous supervision of new generations of scholars and scientists (four of his Ph.D. students became professors in their own right). In this way, he made connections with hundreds of colleagues and students around the world. He will be remembered not only for his groundbreaking research, but also for his generosity, kindness, openness, and unwavering commitment to the pursuit of knowledge.

Leydesdorff, Loet. 1995. *The Challenge of Scientometrics: the development, measurement, and self-organization of scientific communications*. Leiden: DSWO Press, Leiden University.

Leydesdorff, Loet. 2001. *The Challenge of Scientometrics: The Development, Measurement, and Self-Organization of Scientific Communications*. 2. ed. Parkland, Ill.: Universal Publ. <http://www.gbv.de/dms/hbz/toc/ht013731028.pdf>.

Leydesdorff, Loet. 2021. *The Evolutionary Dynamics of Discursive Knowledge: Communication-Theoretical Perspectives on an Empirical Philosophy of Science*. Qualitative and Quantitative Analysis of Scientific and Scholarly Communication. Cham: Springer International Publishing. <https://doi.org/10.1007/978-3-030-59951-5>.

THE 28th NORDIC WORKSHOP ON BIBLIOMETRICS AND RESEARCH POLICY 2023

11-13 OCTOBER 2023
 GOTHENBURG, SWEDEN

CALL FOR ABSTRACTS

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The 28th Nordic Workshop on Bibliometrics and Research Policy (NWB2023) is scheduled from October 11-13, 2023. The Department of Communication and Learning in Science at the Chalmers University of Technology will host the NWB2023 in Gothenburg, Sweden.

This workshop has been a consistent and enduring practice within the bibliometrics community for nearly three decades. The

aim of this workshop is to bring together policymakers, library directors, bibliometric analysts, library professionals, PhD and postdoctoral students in bibliometrics, and researchers in library and information science and other relevant fields. It aims to promote the convergence of bibliometric research with research policy, highlight the latest bibliometric research activities from the Nordic region and beyond, and

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IMPORTANT DEADLINES

Submission of abstracts	19 May
Notifications of acceptance	21 June
Opening of registration	22 June

NOTA BENE

The workshop will only be able to accommodate the **first 100** registered participants. The organisers therefore highly encourage interested individuals to register as soon as possible to secure their spot. A no show-up fee of 200 Euro + VAT will be invoiced to registered participants not showing up at the workshop.

enhance the ties between bibliometric research groups and their PhD students.

The Nordic Workshop on Bibliometrics and Research Policy was initiated by Professors [Olle Persson](#) and [Peter Ingwersen](#) in 1996, and has been held annually, rotating between Denmark, Finland, Iceland, Norway, and Sweden. Gothenburg is hosting the workshop for the first time. Previous workshops in the series were held in Helsinki (1996, 2012, 2017), Stockholm (1997, 2001, 2005, 2009, 2013), Oslo (1998, 2002, 2006, 2015, 2020),

Copenhagen (1999, 2007, 2016), Oulu (2000), Aalborg (2003, 2011), Turku (2004, 2022), Tampere (2008), Bergen (2010), Reykjavik (2014, 2019), Borås (2018) and Odense (2021).

From 1996 to 2001, the Nordic Workshop on Bibliometrics was held with the aim of providing a forum for researchers and practitioners to discuss and exchange knowledge on bibliometrics. This series of workshops proved to be instrumental in advancing the field, as well as fostering collaboration among Nordic countries. Following the success of the initial workshops, the Nordic Workshop on Bibliometrics and Research Policy was launched in 2002 and has continued to the present day. This expanded forum not only covers bibliometrics, but also addresses broader research policy issues such as research evaluation and impact assessment.

Participants who wish to present their research with a Nordic audience and beyond are encouraged to submit a 250-word abstract. If an abstract is accepted, the authors (at least one) must register for the event and attend the workshop in person. The workshop is open to participants worldwide and will be conducted in English. There is no cost associated with registration; however, participants must cover their travel and accommodation expenses. More information is available at <https://nwb2023.lib.chalmers.se>.

HIS NAME WAS PRICE, NOT DE SOLLA



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Derek John de Solla Price (1922 – 1983) is the well-known “father of scientometrics”. He began his scientific career as a physicist, turned historian of science, and as such became involved in scientometrics. For a full description of his life, we refer to (Yagi et al., 1996).

In several cultures, people use a middle name between the first (given) name and the family name, the former American president John Fitzgerald Kennedy being a prime example. Occasionally this middle name is chosen by the individual themselves. This was the case for D.J. Price who himself decided to use the name of his mother as a middle name, and hence became known as Derek John de Solla Price. Garfield (1980) describes the origin of Price’s name and the problems the *Science Citation Index* had with handling his name.

In the Web of Science Price’s name is in most cases correctly written as Price, * (where * stands for anything). Yet, searching for cited work: Little Science, Big Science ... and Beyond, combined with Publication Year: 1986 yields 33 variations, of which the one that is by far cited the most is Solla Price, *. I note that Price de Solla, * is cited 9 times.

Being emerged in this, I checked my own book *Becoming Metric-Wise*, (2018) written in

collaboration with Leo Egghe and Raf Guns, and found, to my great surprise that Price’s works were mentioned in the reference list as Price de Solla, D.J. How was that possible? I checked the manuscript we submitted to Chandos and found – correctly - Price, D.J. de Solla. Hence, the person who handled our book manuscript at Chandos must have decided that they know better, and later we (the authors) did not spot the error while proofreading.

As a reviewer, I often see de Solla or Solla as Price’s name in an alphabetic reference list. May I ask my colleagues to avoid this mistake, and ... proofread attentively.

REFERENCES

- Garfield, E. (1980). Price’s citation cycle. *Current Contents*, 39 (September 29, 1980).
- Rousseau, R., Egghe, L., & Guns, R. (1981). *Becoming Metric-Wise. A bibliometric guide for researchers*. Kidlington: Chandos.
- Yagi, E., Badash, L., & Beaver, D. de B. (1996). Derek J. de S. Price (1922–83). Historian of science and herald of scientometrics, *Interdisciplinary Science Reviews*, 21(1), 64–84.

HUMANITIES GO SCIENTOMETRICS



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THE SCIENTOMETRICS PERSPECTIVE

Different fields have different standards as their research communities may have their own, different communication cultures. It is known that scholarly and, more generally, scientific communication considerably differs from those in the sciences. This simple truth has resulted in many initiatives on the part of the scientometricians to overcome the observed problems but also in much frustration as the question arose of in how far research output is quantifiable at all to serve as input of measurement let alone in the context of research evaluation. Most of the known issues have become almost commonplaces: The different publication types and venues, the publication language, the different role that citations play, information sources and targets in the humanities that often considerably deviate from those in the sci-

ences and even from those in many fields of the social sciences. The final knock-out for bibliometricians was probably the insufficient coverage of available data sources, which, in many fields of the humanities, resulted in an inadequate and certainly not representative basis for measurement and the indispensable benchmarking exercises. Furthermore, research work in humanities does not only manifest itself in publications in journals, conference proceedings, book chapters or monographs.

Scientometrics initiatives comprised, for instance, suggestions for improving the coverage of underlying data and extending the metrics to be applied to measure research activity and impact. This was, of course, based on appropriate scientometrics studies on how to cope with the challenges arising from the attempts to measure research in the social sciences and, most notably, in the humanities (Glänzel & Chi, 2019). However, broadening the cov-

erage of bibliographic databases (Martin et al., 2010; Lauer, 2016) or using alternative metrics did not prove a satisfactory remedy to encompass all or at least most typical research activities and manifestations of their impact either. The reception of these solutions by the respective communities was therefore rather restrained, if not sceptical.

THE COMMUNITIES' PERSPECTIVE

On the other hand, one should not forget that this unsatisfactory situation also forced the respective communities to come up with their own initiatives. There were several reasons, such as the changing publication strategies, or moving away from their traditional communication patterns. Thus, there is an increasing share of publications in journals in humanity disciplines, where this is rather untypical or at least less frequent, and possibly even more in English. Another important reason for these initiatives was the deficiency these communities perceived, because their fields have become excluded from bibliometric studies and the quantitative input for evaluation exercises, or somewhat isolated from other fields. We just mention two examples as *pars pro toto*. As early as in 2010, a conference was organised in Bern to pave the way for possible application of scientometrics methods to the evaluation of research in Law. Scientists in the field had recognised and discussed the necessity and methods of research evaluation including appropriate metrics in their field (Lienhard & Amschwand, 2010).

Other communities have adopted and incorporated scientometrics/informetric models and method into their disciplines, of course, not always in an evaluative context but substantiating the usefulness of bibliometricians' research and results. In this context, we would like to refer to musicology, namely the analysis of classical composers' similarity, differentiation

and evolution (Georges, 2017; Georges & Nguyen, 2019; Georges & Seckin, 2022) or to (quantitative) linguistics (Popescu & Altmann, 2006; 2007), where the well-known h-index model has been further elaborated for the use in linguistics. We just mention in passing, that this elaboration proved useful for scientometrics as well (Glänzel & Heeffer, 2019) – a clear case of interdisciplinary cross-fertilisation.

But coming back to the above-mentioned issues in the quantification of humanities research. Most recently, the question of the observed or at least assumed relative isolation of research in philosophy was addressed and tackled (Chi & Conix, 2022; Conix, Lemeire & Chi, 2022). Philosophers raised long-standing questions about the isolation of philosophy, which were ultimately answered through the cooperation between philosophers and bibliometricians utilizing customized bibliometric methods. These studies empirically test whether certain parts of academic philosophy are highly isolated from other fields of academic research or even from the broader public, and more specifically, whether LEMM (Philosophy of Language, Epistemology, Mind and Metaphysics) is more isolated than Philosophy of Science and Philosophy of Value Theory. The basic assumption was confirmed that LEMM or the so-called core philosophy is more isolated than other subfields with stronger relations between other science fields.

In these two studies, the database selection highlights the limitations of common bibliometric databases in terms of their coverage of philosophy papers. Furthermore, the applied bibliometric methods were developed through long and profound interactions between scholars from the two distinct fields, improving the method developments in both fields. This innovative collaboration not only demonstrates the philosophers' aspiration to integrate scientometric methods into their discipline, but also highlights the positive feedback and acceptance received from both communi-

ties through several seminars, conferences and authorized journals. In general, the discussion surrounding the presentation of these papers is stronger and more motivating in the field of philosophy. The increasing interest of bibliometrics methods is also evident in other qualitative works undertaken by philosophers (see Massey, 2014; Noichl, 2021; Bonino et al., 2022). It is obvious that scientometric methods would contribute to structure a field in humanities and provide creative solutions to long-standing questions within the field.

It is worth noting that the degree of acceptance for adopting and developing bibliometric and quantitative methods in philosophy studies is much higher than that for applying bibliometric methods in evaluations within the field. For instance, Feenstra and López-Cózar (2022) revealed negative feedback from philosophers regarding the use of bibliometric indicators as a preferred criterion of quality for researchers. These two applications of scientometrics follow distinct developmental trajectories and may receive varying levels of support and resources.

This kind of intention to apply quantitative methods could be anticipated in other fields within the humanities, given that more and more humanists are open to these methods, as evidenced by the examples mentioned above. The field, which was previously isolated from new solutions, is finding quantitative methods increasingly engrossing.

SOME CLOSING WORDS

The above examples substantiate what Lienhard and Amschwand (2010) concluded for the research assessment in Law, namely that the responsibility for the creation and development of appropriate data sources and instruments, which are taking the peculiarities of research in these fields into account, cannot be left to the bibliometricians and evaluation experts alone.

Besides the scientometricians' interest in extending metrics to the social sciences and humanities, scientists in humanities too have recognised and experienced the need for adopting and developing quantitative methods to their disciplines for at least one decade. Whenever scientometricians and humanities scholars together come up with true interdisciplinary solutions, this common tread could contribute to decrease the perceived or perhaps real relative isolation.

REFERENCES

- Bonino, G., Maffezoli, P., Petrovich, E. & Tripodi, P. (2022). When philosophy (of science) meets formal methods: a citation analysis of early approaches between research fields. *Synthese*, 200, 177
- Chi, P.S. & Conix, S. (2022). Measuring the Isolation of Research Topics in Philosophy. *Scientometrics*, 127(4), 1669–1696.
- Conix, S., Lemeire, O. & Chi, P.S. (2022). The Public Relevance of Philosophy. *Synthese*, 200, 15.
- Feenstra, R.A. & López-Cózar, E. D. (2022). Philosophers' appraisals of bibliometric indicators and their use in evaluation: from recognition to knee-jerk rejection. *Scientometrics*, 127, 2085–2103
- Georges, P. (2017). Western classical music development: a statistical analysis of composers similarity, differentiation and evolution. *Scientometrics*, 112, 21–53.
- Georges, P. & Nguyen, N. (2019). Visualizing music similarity: clustering and mapping 500 classical music composers. *Scientometrics*, 120, 975–1003.
- Georges, P. & Seckin, A. (2022). Music information visualization and classical composers discovery: an application of network graphs, multidimensional scaling, and support vector machines. *Scientometrics*, 127, 2277–2311.

- Glänzel, W. & Chi, P.-S. (2019) *Research Beyond Scholarly Communication – The Big Challenge of Scientometrics 2.0*. In: Catalano, G., Daraio, C., Gregori, M., Moed, H.F., Ruocco, G. (eds), Proceedings of the International Conference on Scientometrics and Informetrics, 424–436.
- Glänzel, W. & Heeffer, S. (2019). The golden section in science: an interdisciplinary case. *ISSI Newsletter*, 15(2), 24–33.
- Lauer, G. (2016). The ESF Scoping Project ‘Towards a Bibliometric Database for the Social Sciences and Humanities’. In: Ochsner, M., Hug, S., Daniel, HD. (eds) *Research Assessment in the Humanities*. Springer, Cham. P. 73–77. https://doi.org/10.1007/978-3-319-29016-4_6
- Lienhard, A. & Amschwand, F. (2010), Die Vermessung des juristischen Geistes. Zum Stand rechtswissenschaftlicher Forschungsevaluation. *Neue Zürcher Zeitung*, 13. Dezember 2010, Nr. 290.
- Martin, B. et al. (2010), *Towards a Bibliometric Database for the Social Sciences and Humanities – A European Scoping Project*. Report. Accessible at https://globalhighered.files.wordpress.com/2010/07/esf_report_final_100309.pdf
- Massey, T. (2014). Structuralism and Quantitative Science Studies: Exploring First Links. *Erkenntnis* 79 (S8), 1493–1503.
- Noichl, M. (2021). Modeling the structure of recent philosophy. *Synthese*, 198, 5089–5100.
- Popescu, I.I. & Altmann, G. (2006). Some aspects of word frequencies. *Glottometrics*, 13, 23–46.
- Popescu, I.I. & Altmann, G. (2007). Some geometric properties of word frequency distributions. *Göttinger Beiträge zur Sprachwissenschaft*, 13, 87–98.