INTRODUCING THE DEREK DE SOLLA PRICE AWARDEE OF 2017

INTERVIEW BY BALÁZS SCHLEMMER

The awarding ceremony of the Derek de Solla Price Memorial Medal has become an essential part of the programme of ISSI conferences since the foundation of the Society in 1993. The Price Medal was conceived and launched by Tibor Braun, founder and Editor-in-Chief of the international journal Scientometrics, and is periodically awarded by the journal to scientists with outstanding contributions to the fields of quantitative studies of science. This year's awardee is Judit Bar-Ilan (Department of Information Science, Bar-Ilan University).
Congratulations to the award-winner!

JUDIT BAR-ILAN

■ **Judit Bar-Ilan from the Bar-Ilan University. How many zillion times have you been asked about the (non-existing) relationship between your name and the university's name?**

→ Countless times, this is the first question I am asked. Once one publisher was sure that this was a mistake, and changed my info to Judit Bar-Ilan at Information Science University. In any case, you can blame my husband, Danny, for this.

■ **What was your future dream job as a child? And when/how did you start considering a scientific career?**

→ From when I remember, I dreamt to be a mathematician. It was very clear to me that I want an academic career. I liked to solve problems, went to special classes. My Dad is also a researcher – retired, but still active.

■ **Due to the interdisciplinary nature of scientometrics/informetrics, it is quite common amongst its researchers that they graduate in a field completely different from LIS. Just like Mike Thelwall, the previous Price-awardee, you also came from the direction of mathematics and computer science—better yet, you pretty**

for research. One day I heard that there is an open position at the School of Library, Archive and Information Studies at the Hebrew University for someone to teach technological courses. My husband encouraged me to apply, probably because he wanted to return to his birth town, Jerusalem. This was the first time I met Prof. Bluma Peritz, the Head of the School. This meeting changed the direction of my academic career. I wanted to get more involved, and not just teach programming courses. Bluma introduced me to the world of bibliometrics and to other areas of library and information science. What I learned from Bluma fascinated me. I have no regrets that I abandoned my dream as a child to become a great mathematician. I really like what I am doing today, thanks to Bluma. Like my Dad says: it is a privilege to be able to do your hobby at work and to get paid for it.

Another coincidence is that at the same time, around 1994 the Internet and World Wide Web started to become mainstream. This made me think of how bibliometric techniques can be applied to the Internet and to the Web. My first study, that applied bibliometric methods to information retrieved from the Internet was on the mad-cow disease that erupted in the UK in 1996. I followed the messages and discussions related to the disease on Usenet News-

soon also got involved in webometrics/ altmetrics, too. The question is self-evident: how did a mathematician like you (dealing originally with mathematical, programming, computing and security problems) wind up counting citations/ hyperlinks and analysing search engine performances—especially 20 years ago when most of us were just started to get familiar with the most basic knowledge on the world wide web?

→ This is a very good question. After my postdoc, I had a position at the Open University in Israel, where I had a lot of administrative duties, and little time

groups, the forerunners of social media websites. I was able to show that interest rose grew exponentially at first, but quite soon Usenet users lost interest, similarly to the growth curves observed for scholarly articles published on a topic. The major difference is that on the Internet everything occurs much faster. In addition, the study showed Bradford's Law of Scattering is also applicable, where posts are analogous to articles and Usenet newsgroups to journals. Core newsgroups that discussed the disease and its implications were identified.

■ Do you still remember what the main findings of your first publication were? Actually, what was your first publication?

→ There is no clear answer to this question. In high school, it was possible to conduct individual projects with the supervision of academics. I chose to study the history of trigonometry. When the project was completed, a short paper summarizing the study was published in a local journal. My first publication in computer science was published in a conference proceedings in 1989, where with my co-author, we developed techniques to compute functions quickly and securely. This paper is one of my top cited publications according to Google Scholar. And if you ask about my first publication in informetrics, then it is the mad-cow disease paper mentioned above. The paper was published in Scientometrics in 1997.

■ What do you consider your most important publication or research topic? Not necessarily the one with the highest citation impact but the one which is your personal favourite just because of the complexity/beauty of the research, or because of the outcome.

→ My favourite is a paper on using a variant of the h-index for ranking search results. This paper connects two subdisciplines of information science: in-

formetrics and information retrieval. The paper has not received a lot of attention (to put it mildly), but perhaps it is a sleeping beauty? Even if it does not ever wake up, I still like the idea.

■ Have you ever had a very surprising research result which was completely against your preliminary expectations?

→ Yes, when I set out to explore Google Scholar (GS) citation counts. In the first years after Google Scholar was launched (in 2004), it was heavily criticized for having duplicates, "phantom" citations (i.e., the citing items displayed on GS that did not actually cite the publication), for questionable citations coming from non-academic sources and for its unknown coverage. I examined all the citations to the "Introduction to Informetrics" book retrieved from GS. By examining I mean trying to locate all the citing documents, and checking that they reference the book. Contrary to my expectations GS performed quite well. There were a few duplicates or items that did not refer to the book but this was negligible (there are mistakes in commercial citation databases as well). So instead of showing how unreliable GS was, I showed the opposite.

■ While I was browsing through your research areas and publication list I noticed a few exciting topics that venture beyond the usual horizon of the regular LIS, informetrics, webometrics & altmetrics topics. Apparently, you have had shorter or longer field trips to such territories as the world of chess, the blogosphere, the online Hebrew literature, information/advice to Israeli citizens, Facebook usage of political parties, altmetric gender bias—just to name a few. How have they built into your career?

→ Some of these studies just happened. I was drawn into these areas by colleagues and students. Some are connected in some ways to my main topics of interest:

informetrics and information retrieval (IR). The methods and techniques we used in most of these papers are ones I use also in informetric and IR studies: content analysis, log analysis and evaluation schemes. By collaborating with others, I learn from them (and hopefully they learn from me) and I am exposed to new ideas and new ways of thinking.

Additional ways to be exposed to new ideas is to attend conferences, and to be aware of the new studies in the field.

■ **My attention was caught by one 'extracurricular' publication in particular. It's title (Perceived credibility of blogs on the Internet – the influence of age on the extent of criticism) suggests that the criticism is related to the age. In an ideal world, yes, we all become wiser by age, but is this really true? Your article was written in 2013, an earlier version dealing with credibility of bloggers and blog posts on conventional and alternative medicine was written and presented in 2011— both way preceded the full blooming of the political 'alternative facts', medical quackeries and other charlatanisms that put social media's credibility issues in the centre much more vigorously than ever before. How do you see the relationship between abuse/misuse of low publication threshold provided by blogs and social media vs. credibility issues in 2017 and what do you forecast for the future?**

→ Our aim in the study was not to test age-specific differences, but to learn how people assess credibility of information of blog posts. Several parameters were studied, one of them age. The experiment was conducted in 2009, the outcomes might be different had we repeated the study now. But "fake news" are here to stay, and digital and information literacy skills are needed to assess the credibility of the information. There is a very nice theory of Petty and Cacioppo that can be applied to credibility and quality assessment. This theory says that there are two

routes people take when assessing the credibility of information: the central route (when the information is examined carefully) and the peripheral route (when quality is decided based on peripheral information, like how many likes a post received, how many followers the author of the post has or how attractive is the design of the Web page on which the information appeared). Using the peripheral method, which is sometimes inevitable, can lead to wrong conclusions. This situation is not unique to social media or the Web, it is quite similar to the use/misuse of the journal impact factor for assessing individual articles.

■ **Which one do you rather prefer: teaching or research? Do you happen to have a memorable story from the classroom?**

→ Definitely research. I am not a very good teacher (to put it mildly) based on feedback from students, but I try to improve.

■ **How do you think your colleagues and/or students characterize you? And how do you refine the picture?**

→ Well, you should ask them. I think that at first students are a bit afraid of me, but this fear hopefully disappears once they work with me more closely. I am in contact with most of my previous students.

■ **Your homepage at the university lists around 150 publications, reviews, book chapters etc. under your name (or as a co-author). But it also lists 143 papers presented at different international conferences between 1989 and 2016. It means that on average you attended a conference in every 2 months throughout the 27 years of your scientific career. You also hold your academic positions with teaching obligations, as well as numerous programme committee and editorial board memberships. What hobbies and leisure time activities can you practice under this workload?**

→ Thanks for the statistics, I was not aware of this. Some of the conferences are lo-

cal, and it takes less effort to participate, in some other cases a co-author presented the paper. However, it is true that in recent years I travel quite a lot. And you are right about the other administrative and academic duties – I should learn to say "no" to some of the invitations and requests. On the other hand, by being involved, I have a better understanding of academic structures and processes.

Leisure time? I wish I had more, but in the free time I have I like to play with my grandson, go to the gym, travel in the world and to spend time with my family and friends.

■ **5 books, 5 CDs and 5 movies you would take to a desert island...**

→ Since as you pointed out, I am very busy I'll only list 3-4 each. First of all, CDs are passé, but my favorite singers are Leonard Cohen, Barbra Streisand and Andrea Bocelli. Favorite movies: Life is Beautiful, Sunshine, Woman in Gold and Fiddler on the Roof - all related to the fate and history of the Jewish people. Favorite books: The Little Prince, Pride and Prejudice (I am a woman after all), and Tanár Úr Kérem (Please Sir) (Not only a Jew, a woman but also Hungarian). However, I would gladly exchange all these for a laptop with connection to the Internet.

■ **Could you mention a few of your most memorable conference (or other job-related) stories?**

→ I don't have specific stories, but I am honored that Eugene Garfield and Tim Berners-Lee attended and listened to my presentation (at two separate occasions on two different topics).

■ **What was the most embarrassing situation during your professional career? And the funniest?**

→ Most embarrassing: During my PhD, when I presented something at a conference, that turned out to be wrong. Not funny, but touching, when at the ISSI Conference in Colima, Mexico, Bluma revealed to the organizers that it was my birthday, and the whole conference celebrated me.

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