Educated readership

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Abstract

A culture in which academics can judge for themselves is most appropriate for thinkers — more so than leaving the task to rating agencies.

1   Introduction

Specialists, whether professionals or amateurs, are expected to be able to judge the material of their speciality — otherwise they would not be [good] specialists. Anyone can read what is 'on the box' of a certain product, whether this is an incandescent lamp, a shampoo, or an article in a journal, but only specialists are able to know — and have a personal opinion — whether these items are of good quality or not.

In recent years, academic publications have caught up with the trends found in any commercial product, such as packaging, labelling, and marketing, and this information is becoming increasingly popular in academia. Is reading the information 'on the box' sufficient to tell the quality of the contents? Do academics have the required culture to judge by themselves? Could this culture be substituted by just 'reading the box'?

2   Proliferation

The 'publish or perish' maxim has largely shaped academia in the 20th C. into what is informally known as a 'rat race' — credits to my first academic supervisor, in Seattle. With Life Sciences being remarkably prepotent in publications, it is likely that the drive and rationale behind the maxim is Natural Selection itself: of the multitude of published articles, some ought to surface as most cited (or popular), and hence be [deemed as] dominant.

Writing, in fact, is a superb exercise to put one's ideas together, clarify them, communicate them, and put them to test. While this would be an honourable intent, the focus of the maxim is merely on *publishing*. So, in the hands of less scrupulous people, writing could easily transform into relentless duplication or even plagiarism. And one has to use imagination to find any suggestion of reading, learning, or thinking in the maxim itself. Yet, the maxim has successfully found its way into academic departments, laboratories, and administration.

This uncontrolled proliferation of scientific (or academic) publications is the base for Eugene Garfield's concern and subsequent intent to 'eliminate the uncritical citation of fraudulent, incomplete, [and] obsolete data' (Garfield, 1955). His vision and actions have directed the maxim to shape the academic world of the second half of the 20th C., but their side effects are raising new, special concerns.

3 Citations and popularity

Garfield's attention was not on the published writings themselves, but on the *citations* of such works, which is technically *meta* scientific information. His model was Shepard's (legal) Citations, active since 1873, and his particular wish was to trace the origins and the followups of certain articles, journals, books, subjects, etc. (Garfield, 1955).

Over the years, Garfield managed *inter alia* to create the *Science Citation Index*, which is a catalog of citations, and the *Impact Factor*, which is an index determining the 'influence', 'importance', or popularity of publications, their carriers, and the respective authors (Garfield, 2005). Garfield's wi(l)der dream included 'scientometrics', 'bibliometrics', and 'journalology', aiming at all possible data processing (Garfield, 1955).

In this context, Garfield made the discovery that journals such as *Science* and *Nature* had been very important to Life Sciences. As a consequence, these journals became active targets for any author who wanted to be considered important — even outside the Life Sciences. Suddenly, and persisting to our days, there was a 'holy grail' in academic publishing.

4 Aftermath

Turning the focus on citations, and consequently to significance, importance or popularity, Garfield helped establish reinforcing cycles involving authors, publishers, and publications — for instance, 'popularity breeds popularity', whether this involves journals or authors (Perdicoúlis, 2012) — Figure 1.
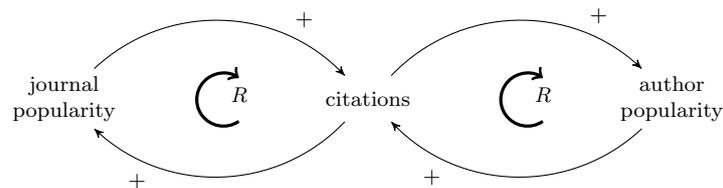

FIGURE 1   'Popularity breeds popularity' through citations

There are common issues with reinforcing loops, which lead to either explosions or extinctions. For instance, publishers (or editors) who want guaranteed success for their publications, will be biased to prefer popular authors over 'entry level' candidates — Figure 2. The 'established' authors and publications are likely to be put on a pedestal, while new ones may never get a fair chance to be read or cited — both, regardless of their quality.

The 'publish or perish' maxim represents a call from academic administration, where popularity becomes an administrative objective and measure. Academic bosses are actively pressing their researchers to publish in certain journals because they are popular — typically represented by an
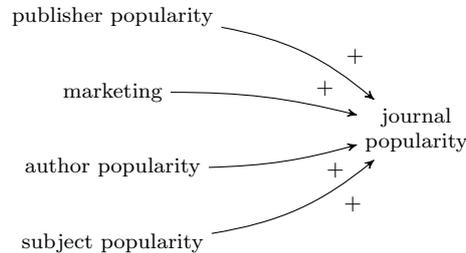
FIGURE 2   A journal's popularity is a blend of variables

impact metric or indexing featured at certain brand name services —, so they can all claim their 'points' and thus regulate internal and external financing.

Somewhere in the backstage of the publishing industry stand the indexing and abstracting agencies, which also perform rating and ranking of publications. These are the authorities behind scientific meta-data processing, such as the *Science Citation Index* and the *Impact Factor* established by Garfield. The group includes Garfield's own *Institute for Scientific Information* — currently under a new designation. Some of their services have been particularly appreciated by researchers in the pre-internet era, where catalogs and abstracts were valuable 'navigation instruments' in the immensity of well-stocked academic libraries.

5   Vigour

The publishing industry is apparently thriving. Academia continues to attract labour force, academics are striving (or pushed) for popularity, and they are practically limitless in creating material to be published — in the worst case free of charge to the publishers, and at times as a source of income (Nature, 2010; Beall, website). On the paying side are the academic institutions, often with government backing, and the authors themselves. It looks like a stable business, and with the added benefit of public service — at a cost to the beneficiary, of course.

The indication of the vigour of the publishing industry may not come so much by looking at the mainstream publishers — that is, long-established publishing houses — as at the relatively new wave of publishers. Self publishers, such as individual academics, for the first time have the opportunity to publish through the advance of technology and communication media. The strongest indication though comes from the appearance of commercial publishers opportunistically established to tap the new promising market, a subset of which are the notorious 'predatory publishers' (Beall, website).

So, half a century after Garfield's intervention, the proliferation of publications, authors, and publishers is even greater, the publishing and display channels, as well as the associated marketing are bigger than ever, and there is a citation and popularity rating and ranking system in place. Nonetheless, it is still not clear how to identify the good publications — or the bad ones, to be avoided. Garfield himself admits that the impact factor, for instance, is not a measure of quality, but there are no other means available at the moment (Garfield, 2005). At least regarding the identification and promotion of quality, it appears that the situation is not much more advanced than the 1950s.

6   Quality

6.1   Dilemmas

As evidenced in other domains of human activity, popularity does not necessarily indicate quality. The case of music, for instance, provides a well-evidenced example with its 'classic' and 'pop' genres contrasting in erudition and sales. In a self-check mode — that is, the Socratic αυτογνωσία — the academic community should review and decide what it values more: popularity or quality. Choosing quality may imply a small deviation from (or rather a correction to) Garfield's good but inappropriately focussed intention — that is, not to eliminate the *citations* to 'bad' publications, but to have a way to *identify* those publications — and for the right (and explicit) reasons, of course.

A modern-day example of such identification work comes from Jeffrey Beall, a librarian at the University of Colorado at Denver, who innovates with his clarity of the quality-of-conduct criteria as much as with the austerity of their application (Beall, website). Namely, he openly rebukes a great number of ('predatory') publishers and other academic wrongdoers, for reasons clearly explained, and produces an online black list. Perhaps this is not the only way to proceed, as it appears to be on the negative side, so a *white list* could be also constructed, published, and maintained online. However, whether black or white, a list approach is still a collective identification, and in this aspect not much different than the current ranking practice.

6.2   Culture

Curiously, why should academics — the thinkers of the world — be interested in gathering 'academic points', like those they collect at the supermarket or the petrol station? Perhaps we could expect different from society's thinkers, and particularly better, open, and more mature judgement. It would be interesting if all academics were able to judge publications for themselves for each particular purpose and application.

By the value it builds, an 'educated readership' culture is likely to challenge the current paradigm of citations and popularity; to question the 'writing on the box', such as impact factors and journal rankings. This is not meant to show irreverence; quite the contrary, it should elevate and promote the critical thinking of academics, which is prime public service. However, the same culture also brings the obligation to maintain a knowledgeable, widely informed, critical, and demanding readership.

As with all cultures, 'educated readership' is developed and maintained by talking about the issues that matter — for instance, publications, quality, reading, judgement, criteria, interests, procedures, origins and uses. These become everyday talk, and come up in common conversations — not just for the elite or for administrators. If this is the reality for academic authors and readers, it suits to become their direct concern and conscious conduct, too.

7   Challenges

An 'educated readership' addresses directly the issue of quality in publications. It offers an alternative to the current indirect approaches based on citations. In the direct approach, the reader becomes the responsible and educated judge, in the spirit of the old saying: 'the proof of the

pudding is in the eating' — credits to my academic mentor, in Salford. Judgement becomes open to discussion and debate: it is everybody's business.

There is also an added bonus for many academic administrators — a great opportunity to go 'strategic': understand *what*, *why*, and *how* is being done by their faculty and staff, rather than seeing them as figures. This way they may be able to direct rather than collect.

Mainly, though, the pressure will be on authors: before an 'educated readership', authorship must be equally elevated to correspond. This should imply less cheating and better quality publications. It just sounds too good to be possible.

References

Beall, J. [Ed.] (website) *Scholarly Open Access*. http://scholarlyoa.com.

Garfield, E. (1955) Citation Indexes for Science. *Science*, **122**(3159):108–111 — Reprinted in *Essays of an Information Scientist*, **6**:468–471 (1983).

Garfield, E. (2005) The Agony and the Ecstasy — The History and Meaning of the Journal Impact Factor. *International Congress on Peer Review and Biomedical Publication*, Chicago, September 16.

Nature [editorial] (2010) Publish or perish. *Nature*, **467**:252.

Perdicoúlis, A. (2012) Recreating established systems. *Systems Planner*, **10**.