

PHILOSOPHY

UNINTENDED RESEARCH CONSEQUENCES

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A rather [unimportant paper](#) attracted my interest in this question. And there is quite some older literature out there, the two most prominent papers are by Elton 2002 and Geuna 2016 where I am trying to connect the dots. If we start with the second reference <https://www.tandfonline.com/doi/abs/10.1080/00213624.2001.11506393?journalCode=mjei20> we immediately see the changes that occurred.

After World War II, the higher education systems of EU countries witnessed an impressive growth in the numbers of students and staff and in spending. For example, the number of students in the EU countries increased from about one million in 1960 to approximately nine million in 1990. In the same period, the gross enrollment ratio-i.e., total enrollment, regardless of age, divided by the population of the age group 20-24-grew from less than 10 percent to around 30 percent, depending on the EU country. This rapid growth was also connected with a rise in society's expectations of economic returns. These two phenomena have led to conflicting pressures on the institutional organization and role of the university. Examples of the tensions characterizing contemporary universities are (1) incompatibility between the demands of elite and mass higher education; (2) friction between curiosity-driven research aimed at the researcher-directed advancement of the knowledge frontier and targeted research driven by the needs of society; and (3) the different impacts of private and public financing.

The "incompatibility between the demands of elite and mass higher education" seems to me the main issue as the masses of higher educated people are producing also masses of research papers. Now we may understand

<https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-2273.00160>

It is argued that many of the consequences that have followed successive Research Assessment Exercises (RAEs) have been unintended and a high proportion of these, particularly the longer term ones, are deleterious or potentially so. Of these, the most serious is almost certainly the competitive, adversarial and punitive spirit evoked by the RAE which is clearly inherent in it.

With the mass production of research papers, [science goes on](#) in “punitive spirit” leading to the most recent description of <https://www.tandfonline.com/doi/abs/10.1080/00140139.2019.1664131?journalCode=terg20> (“[Publish or Perish: Perceived Benefits versus Unintended Consequences](#)” by Imad A. Moosa).

Even where bona-fide papers are published in reputable journals, the problem remains of deciding how important and relevant they are. Professor Moosa examines various measures (mainly counting the numbers of times a paper is cited), none of which appears satisfactory. ...

Productivity is defined solely in terms of journal articles, so that books, blogs, software apps, awards, teaching and many other valuable activities count for nothing...

Professor Moosa rejects the current system, where academics are required to make an annual return of papers published, on which their continued employment depends. Equally, departments are required to make a return of the numbers of staff reaching annual publication levels, and much effort goes into ‘gaming the system’. Staff with less than optimal publication records do not appear in the return. Other staff with exemplary records are hired for the week the evaluation takes place. In fact he suggests that so much effort is diverted from research into grant seeking that there are more ‘managers’ – always ‘senior’- than lecturers in academic departments. Vice Chancellors become CEOs with inflated salaries and legions of Pro-Vice chancellors. The cost of ‘administration’ is such that only a small fraction of ‘research’ funding reaches the actual researchers.

So going back to the initial point – what are unintended research consequence? It looks like that science is dying slowly of self-extinction by [evolutionary suicide](#).

Evolutionary suicide is a process in which selection drives a viable population to extinction. So far, such selection-driven self-extinction has been demonstrated in models with frequency-dependent selection. This is not surprising, since frequency-dependent selection can disconnect individual-level and population-level interests through environmental feedback. Hence it can lead to situations akin to the tragedy of the commons, with adaptations that serve the selfish interests of individuals ultimately ruining a population.

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