

AUTHORSHIP AND MORE - Mic Porter

“Plagiarize, plagiarize, plagiarize - Only be sure always to call it please 'research’”
Tom Lehrer, “*Lobachevsky*” on “*Tom Lehrer Revisited*” c1955

Background

At the Annual Conference I promoted a wide discussion of Authorship under the Workshop format. Scheduled early in the conference only one of our Editors (Bob Stammers) was able to attend however during the Conference I was also able to informally discuss this matter with Editors Tom Stewart and Ken Parsons and with Richard Steele from Taylor and Francis. My briefing article in *The Ergonomist* was commented on by several people but triggered only one formal reply.

At one extreme might be the single copying by an undergraduate who might not understand the boundaries between misrepresented group work, library research and plagiarism. At the other extreme would be the Academic fraud of serial plagiarists seeking to gain advantage for themselves by such behaviour. The examples that follow seek to demonstrate the range of misrepresentation that can occur.

Fraud, Misrepresentation, plagiarism, etc. - Examples

At its most extreme, fraud has always been present in scientific research. The motives for such misrepresentation are no doubt wide, ranging a desire to ‘debunk’ the Scientific community to a desire to speed up the adaptation of some (“obviously correct”) hypothesis. From Piltdown Man (? Pierre Teilhard de Chardin and others) to the pre selection of smooth or wrinkled peas by Gregor Mendel’s Assistant.

The research of Professor Cyril Burt into the IQ of twins was used, among other applications, to underpin the arguments for the 1944 Education Act. Yet, doubt exists to the existence of many of the twins, the statistics used have been questioned and many have tried to trace the collaborators but failed. The papers were published in a journal edited by Cyril Burt who also acted, for these papers at least, as the peer reviewer. (Lock 1996). These examples are both extreme and historical but it is all too easy to come across problematic work today.

Case 1

An undergraduate student¹ who handed in a final project purporting to show the results of collecting anthropometric data from several nursing/residential homes. The means and standard deviation of the results were identical to those to be found in a published text. After investigation the student’s degree was down graded to “pass”. He was told the reasons and did not appeal.

Case 2

An undergraduate project is found to contain direct quotations from two textbooks that, in total, amount to over eleven pages (20%) of the report. The student was given the opportunity to re-submit the following year without prejudice to her degree grade.

Case 3

A 2nd year undergraduate copies, electronically, a formal laboratory report from a 3rd year student living in the same flat. The report is recognised by the Postgraduate supervising the class as one he had written three years earlier and had, himself, passed to another. On the advice of the Course Leader everybody concerned is warned but no further action is taken. The grades awarded (which, decidedly have improved over the years) remain.

Case 4

Two Open University students (brothers) submit identical essays to different tutors in different parts of the country. By chance (estimated at about 1/2500) both are sampled and checked by the same monitor who recognised that they are identical. Students are warned and all subsequent assignments checked, no further plagiarism is detected.

¹ A professor at Rutgers University surveyed more than 6000 students from various “scholastically elite schools” and found 67% admitted to cheating at least once in college. He found that business studies students were most likely to cheat followed by engineers. (Huang 1995).

Case 5

Two virtually identical papers are submitted to two different Journals in the Ergonomics field. Both are sent to the same referee who reports the matter to the Editors. When challenged the Author replies that they intended to withdraw the paper from the second Journal once an agreement to publish had been received. (Porter 1998).

Case 6

A lecturer publishes a paper containing, in part, data collected by undergraduates during project work. The work of others is not acknowledged and, at least, one of the by now ex students concerned feels aggrieved. They are placated by the lecturer who admits an "oversight" to each individually but does nothing to publish this "trivial error of judgement". Some time later another ex-student is overheard making similar accusations at a Course reunion. They are asked what they are going to do but reply that this behaviour is well known and is the reason that the Lecturer concerned chooses the best students to supervise. However nobody feels that the matter is worth taking further as "nothing will ever stick to the Lecturer concerned". (Porter 1998).

Case 7

A Journal Editor passes a paper for peer review to another academic working in the same field. It is alleged that the team with which the peer reviewer was working then incorporated the data for the article in their own patent application. A Legal action is started to resolve the matter. (Marshall 1995).

Case 8

John Darsee "Co-authored" papers that proved fraudulent or error prone² (53 out of 54 by one report - Lock 1996). However, not all of the co-authors accepted responsibility as they had not had oversight of the whole final published paper. (Smith 1997).

Case 9

Every publication from a hospital department in "Middle England" has the 'Profs' name on it, yet s/he has no active involvement or oversight of much of the work reported. (Carley 1998).

Case 10

A researcher contacts the "correspondence author" on a paper that lists several authors. They reply that they are unable to answer the question as although they undertook the experimental design and data analysis they only had a general view of the data that was collected by others at several UK locations. The defence Barrister makes much of this reply when an Expert Witness seeks to quote the original paper in Court. The case settles without further evidence being heard, however, would it have been different if a "Guarantor"² had been listed. (Porter 1998)

Case 11

How should indexes and Abstracts treat a paper withdrawn by the authors because "Further examination of the data on which this paper was based, in the context of another project, has revealed important inaccuracies such that the conclusions of the paper cannot be sustained". (Anon 1998). Should the retraction be published and/or, as is possible with electronic formats, the original erased³ in later "releases"/versions?

Case 12

A student at UCL was identified as having falsified data that, subsequently, was published in Journals. UCL's Provost appointed an independent panel that concluded that the student had acted alone but also that the scope was greater than the original allegation. The ex student resisted the intention of the university to publish retractions firstly by his barrister making an oral presentation to the Provost and subsequently via a judicial review process in the High Court and Courts of Appeal. The cases were found for UCL and examples of the statements and retractions can be seen in Appendix 2. (Incidentally, this matter probably received more attention than had been intended simply because it was to be found on the UCL web site at the same time as publicity was being given to a "RSI" diagnostic test. It was by following a "hot link" from the BBC News Web pages that Mic Porter discovered the material). (UCL 1998).

² In fact many of these errors cleared peer review including one where a boy of 17 was reported as having four children aged 8, 7, 5 and 4. This was "published in probably the best Journal in the world, with the second highest circulation in the world, the New England Journal of Medicine." (Lock 1996).

² This is the approach now adopted by, among others, the BMJ, see Appendix 1.

³ ? "Stalinist style".

Case 13

An article published in a Polish Medical Journal in 1992 was detected (DCSD 1996) as being “practically a copy” of a Danish Medical Bulletin article of 1989. The Danish authors had, however, been replaced by four Polish Academics of which the principal author was now a Professor and Head of a Pharmacology Department. He explained that a Polish translation “had been published due to the neglect of a co-author”. The Head of Department in which the work had appeared to have been undertaken (also an author), apologised and reported that he “felt that his trust had been abused”. He would also refer the case to the Committee for Scientific Ethic and Discipline of the Silesia Medical Academy. The Danish Committee on Scientific Dishonesty (DCSD) reported the matter to the journals involved and MEDLINE. DCSD (1996) reports three other cases including one where the accusation (unfounded) was made that publication was delayed so that other groups might publish first.

Case 14

A Master’s degree student was pressurised by staff members “to change the data reported in her study so that it would ‘better fit’ their prior data and published work; in fact, the data contradicted and proved the prior work as flawed”.

It was “hinted that the work as it stood would not pass peer review scrutiny and implied it would not be worthy of a degree”. She resisted, published the work in Academic Journals and was able to receive her degree. (Chapman 1998).

Case 15

A member of the Ergonomics Society lists among the references to a letter written to a learned Journal what appears to be a publication of a “Government Agency” of which he is the author. The following year (9 months) after the original publication the British Library is unable to supply the item reporting that it has not yet been published. The Author states that it “is still being knocked about by the [“Agency”] and so has not actually appeared in a quotable publication as yet but they are promising it will be”. The “Agency” states that they do not intend to publish what are only notes of a short workshop held at a Conference. (Porter 1998)

(Would/should MP be open to legal actions for slander or liable if he reported this member who might regard this as “just a little over enthusiasm - no big deal - after all haven’t we all been optimistic about the time between submission of the manuscript and it finally appearing in print”?)

Case 16

A Conference Programme Committee (EURO-PAR '95) discovered that plagiarised papers had been submitted to the conference by a CV Papadopoulos. The investigation that followed found:

1. Seven occasions when a plagiarised paper had been published.
2. Eight occasions where a plagiarised paper was submitted but not published in some cases other co-authors are linked, several of which have been traced and found to be innocent.
3. A further eleven papers are suspected of being plagiarised but, as yet, no original source had been found. (EURO-PAR 1995).

Case 17

A University of Chicago Professor published a book review that was “almost precisely” in the words of a graduate student who had written the (A graded) book review as part of his course work. The student complained to the University that, after five years, found against the Professor. As punishment he was:

1. barred from teaching graduate courses, ie restricted to undergraduates only
2. barred from taking new graduates (presumed thesis/dissertation) students
3. removed as co-editor of the journal that published the review.

The ruling on the case “said that penalties might have been harsher, but he only committed ‘plagiarism’ and not the more serious offence of ‘plagiarism with academic fraud’ (the latter defined as plagiarism accompanied by profit). The professor calls this ruling an ‘exoneration’.” (Zar 1996).

Conclusion

It must be noted that there is a separation between Journal Editorship and production and the Society even in the case of *Ergonomics*. The Society, therefore, can have only limited impact upon the Journals notwithstanding that the separation might not be so obvious to those outside Council or the Society at large.

It would appear that a wide range of abuses of academic standard exists but that they, like the ice-berg, are largely hidden. None of the examples of premeditated fraud or plagiarism identified in this paper came from the Ergonomics community or Journals. However, the Society should now take measures to ensure the highest quality standards are maintained and shown to be maintained.

Recommendations for Action

1. Council should accept this report and ensure it is brought to the attention of the Editors of all Journals offered in the Society's membership package and to those running "approved" courses.
2. Council should recommend that "our" Journals either adopt the "Guarantor" scheme used by the BMJ or some similar system to ensure that the role of the different authors can be readily identified and the quality of the whole article guaranteed. This is especially important for multi-author, multi-location projects.
3. That Council gives consideration to a wider distribution of this matter, for example via Chair of Councils' Ergonomist articles.
4. That Council refers this matter to the Publications and other any other committees it sees fit and seeks their proposals for action within a specified timescale.
5. That Council refers to the Membership and Professional Affairs Committees the current Code of Ethics/Professional Practice of the Society which (as quoted on our Web page[10/5/98]) does not cover these matters nor is it applicable to all grades of membership.
6. Council should note that the maintenance of the highest possible professional and ethical standards is an important benefit for all Members of the Society and those that employ, recruit or consult them. Thus the establishment of appropriate mechanisms should occur without delay for the setting of standards and the monitoring/"policing" of their application.
7. As the first people to notice misconduct or plagiarism is likely to be those that are innocently involved or implicated, the Society should identify somebody, a "whistle blower" might contact with appropriate confidential information from which investigation might develop.
8. Takes any other action that it deems necessary so that the likelihood of undetected plagiarism and other misconduct is minimised

References (In the case of web sites the URL and date of last access are given).

- ANON, 1998, Retraction of: First myocardial infarction in patients of Indian and European origin: comparison of risk factors, management, and long term outcome; N Shau Kat, J Lear, J Fletcher, DP de Bono, and K L Woods *BMJ* 1997, 314:550-4, *BMJ* 316:116
- CARLEY, SIMON (1998), Authorship, Message to acad-ae-med@mailbase.ac.uk on 26/1/1998.
- CHAPMAN, Cynthia (1998) Academic Guidelines on Copyright Message to the Cric-Copyright @uni.org list on 18/2/98.
- DANISH COMMITTEE ON SCIENTIFIC DISHONESTY (DCSD) (1996), Annual Report 1995. [http://www.forskraad.dk/publ/rap-uk/kapii.html on 26/3/98]
- EURO-PAR '95 (1995), The Plagiarism Story, [http://www.sics.de/europargs/plagiarism.html on 26/3/98]
- HUANG, SUSAN (1995), Are you cheating? Join the club, *The Daily Californian* (20.11.95) [http://www.dailycal.org/issues/11.20.95/cheating.txt on 27/3/98]
- LOCK, STEPHEN (1996), Fraud and Misconduct in Medical Research, *Medico-Legal Journal* 64(4) p 139-152
- MARSHALL, Eliot (1995), Suit Alleges Misuse of Peer Review, *Science* 270, 22 December p1912-14
- PORTER, Mic (1998) Private communications.
- SMITH, Richard 1997, Authorship : time for a paradigm shift? *BMJ* 314:992
- UNIVERSITY COLLEGE LONDON (UCL) 1998,
Press Statement @ [http://www.ucl.ac.uk/RMI.htm on 11/2/98]
Retraction statement @ [http://www.ucc.ac.uk/RMI/restate.htm on 11/2/98]
Copies of retraction letters
[http://www.ucc.ac.uk/RMI/eisner.htm on 11/2/98]
and
[http://www.ucc.ac.uk/RMI/thatch.htm on 11/2/98]
- ZAR, JERRY 1996, Plagiarism and Academic fraud, email message quoting Ron Grossman of *The Chicago Tribune* (Private communication)

Appendix 1.

As an example of the BMJ Guarantor approach consider an article from 9th May 1998:

Derrick Pounder, David Carson, Michael Davison and Yoshiyuki Orihara (1998) *Evaluation of indices of obesity in men: descriptive study*. *BMJ* 316 1428-9

At the end of the article but before the references it states:

“Contributors: DP initiated the study, designed the protocol, helped analyse data, wrote the paper, and is guarantor for the study. MD helped design the protocol, review the literature, collect and analyses the data. DC and YO collected and analysed data.

*Funding: The Crown Office funds the department of forensic medicine.
Conflict of interest: None”*

Appendix 2.

[<http://www.ucl.ac.uk/RMI.htm> @11/2/98]

(This page is maintained by the Registrar of the College 29 January 1998)

PRESS STATEMENT

UNIVERSITY COLLEGE LONDON

Research Misconduct Investigation: College Statement and Retraction

In October 1994 Dr Lynn Bindman, Reader in Physiology and leader of a research group in the Department of Physiology, told Professor K M Spyer, Head of the Department, that she believed members of her group had uncovered evidence that research data had been falsified. She alleged that Dr Gerolemos Christofi, a former student at UCL who had been a member of her team between 1992 and 1994 had been responsible for this. Some of the allegedly falsified data had been published in the Proceedings of the Journal of Physiology and in the Society for Neuroscience Abstracts.

UCL's Provost, Sir Derek Roberts, decided to appoint a panel of independent experts from outside the College to investigate these allegations. Three senior neurophysiologists from the Universities of Bristol, Edinburgh and London were appointed. They conducted an investigation and reported to the Provost in December 1995.

The panel found that the falsification of research data was more extensive than originally alleged. The report concluded that Dr Christofi alone had been responsible. The other members of the research group, Dr Lynn Bindman, Dr Richard Vickery and Mr (now Dr) Michael Barry were completely exonerated of any falsification.

The College offered Dr Christofi the chance to have the material independently reviewed by an expert of his choice, and at the College's expense. He declined this offer. Dr Christofi submitted a written response to the panel's report and, through his barrister made an oral presentation to the Provost. Ultimately however the Provost accepted the panel's report and recommendations.

The College told Dr Christofi of its intention to publish a retraction of the published articles. In response Dr Christofi asked the Court for leave to apply for a judicial review of the College's conduct of the enquiry and for an injunction to prevent publication of the retraction. His application for leave was rejected by the High Court and also by the Court of Appeal. The Court of Appeal concluded, as had Mr Justice Owen in the High Court that UCL had conducted the investigation and proceedings fairly throughout and had not acted in breach of natural justice. UCL has submitted its retractions for publication by the Journal of Physiology and by the Society for Neuroscience.

For further information on this matter please contact Patrick Edwards, Head of Media Relations at University College London (tel: 0171 391 1621; fax: 0171 209 0117; e-mail: Media@ucl.ac.uk).

Note to Editors: The articles referred to in the statement above are Barry, M J, Christofi, G, and Bindman, L J, Journal of Physiology, 477,52p 1994, and Barry M J, Christofi G, Vickery, R M, and Bindman, L J, Society of Neuroscience Abstract 20, 370, 12, 1994).

Copies of the retraction letter from Sir Derek Roberts, Provost of UCL, and Professor K M Spyer, Head of the Department of Physiology at UCL, to the Journal of Physiology and the Society for Neuroscience, and of the Retraction Statement of Dr Lynn Bindman, Dr Richard Vickery and Dr Michael Barry are attached.

[<http://www.ucl.ac.uk/RMI/eisner.htm> @11/2/98]

UNIVERSITY COLLEGE LONDON

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Provost: Sir Derek Roberts, CBE, FRS, FEng

5 September 1997

Professor David Eisner
Chairman of the Editorial Board - The Journal of Physiology
Department of Veterinary Preclinical Sciences
University of Liverpool
PO Box 147
Liverpool L69 3BX

Dear Professor Eisner

As a consequence of information brought to our attention in October 1994 by Dr L J Bindman relating to two scientific communications and the published abstracts that refer to them from her laboratory, (Barry M F, Christofi G and Bindman L J, *Journal of Physiology*, 477, 52P, 1994; Barry M F, Christofi G, Vickery R M and Bindman L J, *Society of Neuroscience Abstract* 20, 370, 12, 1994) an investigation into the veracity of the published material was initiated. The first stage was an internal Departmental review that established that certain of the experimental results presented in these abstracts had been falsified. The second stage was a formal inquiry instituted by University College London and undertaken by an independent scientific panel drawn from senior neurophysiologists from outside of University College. They concluded that experimental material had been falsified and that, beyond reasonable doubt, Dr Bindman, Dr Vickery and Mr Barry are innocent of falsifying data.

We ask you to publish this letter as a formal retraction relating to those particular abstracts. A more detailed retraction statement is being sent to you by Dr Bindman and we would ask you to publish that subsequent to the publication of our retraction above.

Yours sincerely

Sir Derek Roberts
Provost
University College London

Professor K M Spyer
Head of Dept of Physiology
University College London

[<http://www.ucl.ac.uk/RMI/thatch.htm/> @11/2/98]

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22 October 1997

Dr Thomas Thach,
Junior Programme Committee Chairperson Society for Neuroscience
11 Dupont Circle,
NW Suite 500
Washington DC 20036 USA

Dear Dr Thach

As a consequence of information brought to our attention in October 1994 by Dr L J Bindman relating to two scientific communications, and the published abstracts that refer to them, from her laboratory including one published by your Society (Barry, M F, Christofi, G, Vickery, R M and Bindman L J, Society of Neuroscience Abstract 20, 370, 12, 1994) an investigation into the veracity of the published material was initiated. The first stage was an internal departmental review that established that certain of the experimental results presented in these abstracts had been falsified. The second stage was a formal inquiry instituted by University College London and undertaken by an independent scientific panel drawn from senior neurophysiologists from outside UCL. They concluded that experimental material had been falsified and that, beyond reasonable doubt, Dr Bindman, Dr Vickery and Dr Barry are innocent of falsifying data.

Dr Christofi has twice challenged in the Courts the procedures whereby the College investigated the allegations and the proposal to seek to publish retraction letters. He was unsuccessful on both occasions.

We ask you to publish this letter as a formal retraction relating to the abstract that appeared in your publication. A more detailed retraction is being sent to you by Dr Bindman and we would ask you to publish that subsequent to the publication of our retraction above.

Yours sincerely

D H Roberts
Provost

K M Spyer
Head, Department of Physiology

UNIVERSITY COLLEGE LONDON

Retraction statement

Dr Lynn Bindman and Dr M. Barry regret the need to withdraw a communication published in the Proceedings of the Journal of Physiology, and, together with Dr R. M. Vickery, a Society for Neuroscience Abstract. The publications are:

1. Postsynaptic control of the direction of changes in synaptic strength induced by non-associative intracellular conditioning, in isolated slices of hippocampus, by Barry, M.F., Christofi, G. & Bindman, L.J. (1994) in Proceedings of the Journal of Physiology, 477P 52P.

2. The role of Ca²⁺ in the induction of non-associative long-term depression of synaptic transmission in the rat hippocampal slice, by Barry, M.F., Christofi, G., Vickery, R.M. & Bindman, L.J. (1994) in Soc. Neurosci. Abstr. 20, 373.12. This Abstract was withdrawn at the meeting but remains in print.

In October 1994, we (Dr Bindman, Dr Vickery and Mr Barry) reported to the authorities in UCL our concern that analyses of experimental data carried out in my laboratory had been falsified. An independent external panel of distinguished Professors of Physiology was set up by UCL to investigate the matter. The panel confirmed that there had been falsification of research data including data published in these abstracts. The panel were convinced that, beyond reasonable doubt, Dr Christofi was responsible for the falsification. The panel were convinced, beyond reasonable doubt, that we (Dr. Vickery, Mr. Barry and Dr. Bindman) are innocent of falsifying data.

We should also like to draw attention to our more recent publications that report our attempts to repeat and extend work in which Dr Christofi was involved.

BARRY, M.F. VICKERY, R.M. BOLSOVER, S.R. & BINDMAN, L.J. (1996) Intracellular studies of heterosynaptic long-term depression (LTD) in CA1 of hippocampal slices. *Hippocampus*, 6, 3-8.

BARRY, M.F. VICKERY, R.M. & BINDMAN, L.J. (1996) A non-associative depotentiation of synaptic transmission can be induced postsynaptically in isolated slices of rat hippocampus. *J. Physiol.(Lond.)* 495P, 52P

VICKERY, R.M. & BINDMAN, L.J. (1997) Long-lasting decreases of AMPA responses following postsynaptic activity in single hippocampal neurons. *Synapse* 25, 103-106.

BARRY, M.F. (1997) An investigation into the induction of non-associative long-term synaptic depression in the CA1 region of the rat hippocampus in vitro. PhD thesis, University of London.