

Biased reporting: a vaccination case study

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On Tuesday 28 January 2014, *The Australian* newspaper published a news story by journalist Rick Morton titled “University paid for anti-vaccine student to attend conference.” It provides an illuminating example of how to construct an article that is misleading in several different ways.

Here, I offer a critique of Morton’s story, pointing out a number of its shortcomings and biases. I first give some context about journalistic codes and practices, and my own involvement. After providing some background about the vaccination debate, I go through Morton’s text, presenting information to highlight how it is misleading. In the conclusion, I summarise the types of bias involved and comment on how readily they can be detected.

Context

Many journalists and media outlets aspire to an ideal that can be called objectivity or balance. Elements of this sort of ideal are enshrined in codes of journalistic practice adopted internationally.¹ Recognising that achieving the ideal can be difficult, this goal nevertheless encourages journalists and editors to avoid bias, for example not to publish stories that are factually wrong or surreptitiously serve special interests.²

¹ See for example Itai Himelboim and Yehiel Limor, “Media institutions, news organizations, and the journalistic social role worldwide: a cross-national and cross-organizational study of codes of ethics,” *Mass Communication and Society*, Vol. 14, 2011, pp. 71–92.

² The news values that inform most journalism give preference to criteria such as prominence, conflict and current events, thereby submerging context and processes involving ordinary people. Some journalists aspire to overcome the biases inherent in the usual news values. For example, “peace journalism” seeks to overcome the biases associated with normal reporting of conflicts.

Numerous scholars and commentators have documented violations of objectivity and balance,³ so the existence of biased stories is nothing new. In analysing a single article, I have two main aims: first, to illustrate several methods that can mislead readers even while largely sticking with the facts, and secondly, to indicate the sort of information needed to fully appreciate the bias involved.

Personally, I have an interest in this particular article. My PhD student Judy Wilyman is the subject of the article, and I am mentioned too, not in a positive light. Furthermore, the story is about funding for a conference that Judy⁴ attended, for which I provided a recommendation. So it is reasonable to expect that I have biases too. So let the reader be forewarned: this is an analysis of bias undertaken by someone who has a personal interest in the article.

On the other hand, my personal involvement in the issues covered in the article gave me extra information and insight that would be hard for an outsider to obtain. I use information and insights from being an insider to inform my analysis, but much of this analysis is possible using publicly available information, or at least information available to journalist Rick Morton. This is because a key source of bias is selection of facts out of ones directly at hand or easily accessible.

Over the decades, I've had lots of interactions with journalists, most of them favourable. I'm regularly approached for interviews or background, especially on topics such as whistleblowing and scientific fraud. Personally, I have much admiration for the profession of journalism, which has much in common with scholarship, including a commitment to understanding topics and communicating insights to wider audiences without fear or favour. Being a journalist can be incredibly challenging given the need to get on top of an issue very quickly and to juggle working on several stories at the same time. A print journalist may write as many words in a week as an academic does in a year, so it is unrealistic to hold journalists to the same expectations.

³ For example, W. Lance Bennett, *News: The Politics of Illusion*, 3rd edition (New York: Longman, 1996); Nick Davies, *Flat Earth News: An Award-winning Reporter Exposes Falsehood, Distortion and Propaganda in the Global Media* (London: Chatto & Windus, 2008); Tom Fenton, *Bad News: The Decline of Reporting, the Business of News, and the Danger to Us All* (New York: ReganBooks, 2005); Alexandra Kitty, *Don't Believe It! How Lies Become News* (New York: Disinformation Company, 2005); Martin A. Lee and Norman Solomon, *Unreliable Sources: A Guide to Detecting Bias in News Media* (New York: Carol, 1990).

⁴ I use first names for people I know well and last names for others.

I undertake this analysis of Morton's analysis in the spirit of academic analysis. It is intended as a critique, just as I have undertaken critiques of scholarly writing.⁵ I have no particular personal connection with Morton, with whom I have had just a couple of conversations and exchanged a few emails. I have chosen his article for analysis because it displays several different types of bias in a stark fashion. Spending effort on scrutiny is worthwhile if it reveals problems and patterns that might be of wider significance. Those familiar with analysis of the media will recognise that several of the types of biases in Morton's article are common to nearly all journalism.

The vaccination debate

To appreciate the biases in Morton's article, it is useful to understand a bit about the public debate over vaccination. Vaccines are small quantities of disease agents, such as modified versions of viruses or bacteria, given to individuals with the aim of triggering the immune system and thereby creating immunity to the full-blown disease. Vaccines are available for many diseases, such as polio, measles and whooping cough. In Australia, children are given many doses of vaccines in their early years, starting from birth.⁶

Government health authorities, nearly all researchers and most physicians support vaccination as a public health measure that saves many lives and is extremely safe. Advocates of vaccination often say it is one of medicine's greatest achievements.⁷

In the face of this endorsement by nearly all authorities and experts, there are some critics of vaccination. They say the benefits of vaccination have been oversold and that there are significant risks to an unknown number of children. The critics are

⁵ Among lengthy critiques of individual works are "Left or left behind? Heller and Feher on the peace movement," *Monthly Review*, Vol. 41, No. 8, January 1990, pp. 56–62; "Social construction of an 'attack on science'," *Social Studies of Science*, Vol. 26, No. 1, February 1996, pp. 161–173.

⁶ See the Australian government's National Immunisation Program Schedule, <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/nips-ctn>

⁷ For example, F. E. Andre, R. Booy, H. L. Bock, et al., "Vaccination greatly reduces disease, disability, death and inequity worldwide," *Journal of the World Health Organization*, Vol. 86, No. 2, 2008, pp. 140–146; Paul A. Offit and Louis M. Bell, *Vaccines: What You Should Know*, 3rd edition (Hoboken, NJ: John Wiley, 2003).

concerned about the continually expanding vaccination schedule and say parents should have a choice about whether their children are vaccinated.⁸

Many advocates of vaccination favour methods that encourage or apply pressure to vaccinate. In Australia, certain welfare payments are withheld from parents unless their children are vaccinated or they receive an exemption signed by a doctor. Workers in the health system are required to be vaccinated.

In many countries, public debate over vaccination has occurred for decades, and there is no sign it will end soon.⁹

The Australian vaccination debate

In Australia, the vaccination debate for many years proceeded much the same as in other countries, with a few citizen-based groups being critical of vaccination in the face of endorsement by health authorities. One of the citizen-based groups is the Australian Vaccination Network (AVN), set up in the mid 1990s by Meryl Dorey; it became the largest and most prominent such group in the country.

In 2009, another citizens' group was set up, called Stop the Australian Vaccination Network (SAVN), organised around a Facebook Page. SAVN's goal from the beginning was to shut down the AVN, and to accomplish this it used a variety of methods, including making unsupported claims about the AVN's beliefs, making derogatory and demeaning comments about Dorey and the AVN, making numerous complaints to government agencies about the AVN and attempting to block Dorey from giving talks by writing letters to event organisers, among many other methods.¹⁰ As well as trying to shut down the AVN, SAVNers (those involved in SAVN) have also targeted individuals publicly critical of vaccination.¹¹

⁸ For example, Louise Kuo Habakus and Mary Holland (eds.), *Vaccine Epidemic: How Corporate Greed, Biased Science, and Coercive Government Threaten Our Human Rights, Our Health, and Our Children* (New York: Skyhorse, 2011); Richard Halvorsen, *The Truth about Vaccines: How We Are Used as Guinea Pigs without Knowing It* (London: Gibson Square, 2007).

⁹ See, for example, James Colgrove, *State of Immunity: The Politics of Vaccination in Twentieth-Century America* (Berkeley, CA: University of California Press, 2006).

¹⁰ Brian Martin, "Debating vaccination: understanding the attack on the Australian Vaccination Network," *Living Wisdom*, No. 8, 2011, pp. 14–40.

¹¹ Another target was Mina Hunt: see Brian Martin and Florencia Peña Saint Martin. El mobbing en la esfera pública: el fenómeno y sus características [Public mobbing: a phenomenon and its features]. In Norma González González (Coordinadora),

SAVN's struggle against the AVN has become a significant feature of the Australian vaccination debate, involving numerous government investigations, court cases, news stories and a vast outpouring of online commentary. This struggle is the essential context for Morton's article, but Morton does not mention it.

Judy Wilyman

Judy taught high school science in Wollongong for many years and then did a master of science degree at the University of Wollongong, undertaking a critique of the Australian government's policy on pertussis. In 2007 she started a PhD under my supervision. After six months, she moved to Perth and enrolled at Murdoch University, where she also coordinated courses on environmental and occupational health. In 2011, she started her PhD afresh at Wollongong. Her current thesis title is "A critical analysis of the Australian government's rationale for vaccination policy."

As well as undertaking her PhD, Judy has been a critic of vaccination in public campaigning, and soon became a target of SAVNers. They have made numerous derogatory comments about her on the SAVN Facebook page and on blogs run by SAVNers. As well, some of them have made formal complaints about Judy and about me to officials at the University of Wollongong. This sort of campaign directed at a PhD student is extremely unusual: in my decades of researching suppression of dissent, I have never heard of another such case anywhere in the world.

Morton's article fails to mention two essential features of the context: SAVN's attack on the AVN and SAVN's attack on Judy. Indeed, his article can be considered part of the attack on Judy.

Few readers of this article would be aware that Morton has taken a special interest in Judy's research, having made approaches to her, me and the university concerning previous articles, one of them published¹² and the others apparently not. Nor would they be aware of the biased way in which he has approached the stories. In interviews with me, and in questions sent to the university, he has shown a one-sided

Organización social del trabajo en la posmodernidad: salud mental, ambientes laborales y vida cotidiana (Guadalajara, Jalisco, México: Prometeo Editores, 2014), pp. 91–114.

¹² Rick Morton, "University stands by anti-vaccine student," *The Australian*, 26 September 2012. It contains some of the same biases as the ones described here in his 28 January 2014 article.

orientation, with the questions seemingly based on the presumption that there is something inappropriate about Judy's candidature and research.¹³

Choice of topic

The topic of Morton's article is the university's funding of Judy's trip to a conference. Why should this be considered newsworthy? After all, it is commonplace for research students to be funded to attend conferences. It is worth probing a bit further into Morton's choice of a topic, and into what topics he did not pursue.

The implication of the article is that there is something dodgy about this conference, because of the allegedly shady operations of the company that organised the conference. But if this is considered news, what about other shady operations in the vaccination area? Vaccines are tested and manufactured by pharmaceutical companies, and several of these companies are known to be involved in corrupt activities, including misrepresenting research findings, ghostwriting scientific papers and suppressing reports of adverse effects of drugs. The companies sponsor or subsidise numerous scientific and medical conferences, using them as platforms for promulgating favourable reports on their products. They pay scientists and physicians to attend conferences and provide them with free samples of drugs, and offer other perks. This whole area is rife with illegal, corrupt and dubious practices, some of them involving billions of dollars and costing thousands of lives.¹⁴

¹³ Here are Morton's questions to the University of Wollongong sent prior to his 28 January 2014 article:

1. How does the university view the scientific standing of this conference?
2. Is the university satisfied it was a credible event for Ms Wilyman to attend?
3. Is the university aware Ms Wilyman has used her presentation at the event to bolster her claims about vaccine programs?
4. Does the university believe its reputation can suffer if it funds PhD students or staff to attend questionable conferences?

¹⁴ John Abraham, *Science, Politics and the Pharmaceutical Industry: Controversy and Bias in Drug Regulation* (London: UCL Press, 1995); Marcia Angell, *The Truth about the Drug Companies: How They Deceive Us and What to Do about It* (New York: Random House, 2005); John Braithwaite, *Corporate Crime in the Pharmaceutical Industry* (London: Routledge & Kegan Paul, 1984); Ben Goldacre, *Bad Pharma: How Drug Companies Mislead Doctors and Harm Patients* (London: Fourth Estate, 2012); Peter C. Gøtzsche, *Deadly Medicines and Organised Crime: How Big Pharma Has Corrupted Healthcare* (London: Radcliffe Publishing, 2013); Jerome P. Kassirer, *On*

Then there is corruption in the Australian medical profession, with physicians gouging Medicare to the tune of billions of dollars per year through false and deceptive claims, which collectively in dollar terms constitute one of the biggest crime operations in the country.¹⁵ This is in addition to the special favours that physicians accept from pharmaceutical and other companies.

Any journalist looking for a story about corruption would find much material involving pharmaceutical companies and the medical profession. The stakes are huge in terms of money and human health. However, few journalists have tackled this sort of corruption. Morton turned instead to a matter of \$3000 involving a PhD student who did not receive any other funding for her research.

If the focus is on dodgy academic conferences, there is plenty of material to pursue. From what I know, most academic conferences are fairly predictable affairs, with speakers presenting papers on their research areas and spending time socialising. However, some conferences are de facto junkets, at least for some participants, who may spend minimal time in conference sessions and every opportunity seeing the local sights, sometimes in exotic locations. Many researchers receive funding to attend conferences, with the funds coming either from the conference organisers or the attendee's institution.

Those most likely to be in a position to profit from conference attendance are renowned scholars, and those in areas where corporate or government funding is ample. Researchers in unfashionable fields are likely to end up out of pocket.

Throughout Australia and the rest of the world, there are many PhD and postdoctoral students who receive scholarships or fellowships, sometimes supplemented with other benefits, sponsored by organisations with a vested interest in research outcomes, most commonly corporations and government agencies. For example, a mining or electricity company might contribute to a research project that offers scholarships and/or fellowships to members of the research team. Some recipients have

the Take: How Medicine's Complicity with Big Business Can Endanger Your Health (Oxford: Oxford University Press, 2005).

¹⁵ Kathryn Flynn, one of my PhD students, wrote her thesis on this topic. It is the definitive treatment. *Medical Fraud and Inappropriate Practice in Medibank and Medicare, Australia 1975–1995* (University of Wollongong PhD thesis, 2004), <http://ro.uow.edu.au/theses/2071/>. On the US situation, see Malcolm K. Sparrow, *License to Steal: How Fraud Bleeds America's Health Care System* (Boulder, CO: Westview, 2000).

to sign away their rights to intellectual property or to agree not to publish results for a period, or sometimes not at all. In many such projects, there is an inherent conflict of interest: researchers cannot publish without fear or favour, because this might jeopardise their access to future funding and jobs.

In Australia, there are hundreds of research projects in which a conflict of interest is built into funding arrangements: researchers stand to gain research funding, consulting opportunities, future jobs and other benefits, but only if they continue to come up with results welcome to the organisation funding the research.

On the other hand, there are quite a few research areas, for example concerning the environment and public health, where such funding and career opportunities are scarce or nonexistent, even though citizens would welcome studies. Groups with money and resources do not fund research in such areas because they expect findings would be contrary to their interests. The resulting gap in knowledge is referred to as “undone science”.¹⁶

Vaccination, as a research area, has both these dimensions. There is funding available for researchers to develop new vaccines, to study the operation of current vaccines and to study how to promote vaccination, and some of this funding leads to conflicts of interest, for example when researchers receive money from pharmaceutical companies to study vaccines in clinical trials. In addition, some of these researchers sit on panels advising on the government’s vaccination policy, an additional conflict of interest.

On the other hand, anyone focusing on problems with vaccination is very unlikely to receive funding from pharmaceutical companies. This is an understatement. Becoming an open critic of any aspect of vaccination is a very bad career move. Because there is little money for critical studies of vaccination, the potential for conflicts of interest is minimal.

Morton, in making a story out of Judy’s conference attendance, completely ignored the big problems in research agendas.¹⁷

¹⁶ Scott Frickel et al., “Undone science: charting social movement and civil society challenges to research agenda setting,” *Science, Technology, & Human Values*, Vol. 35, No. 4, 2010, pp. 444–473; David Hess, *Alternative Pathways in Science and Industry: Activism, Innovation, and the Environment in an Era of Globalization* (Cambridge, MA: MIT Press, 2006).

¹⁷ Journalists often ignore the commonplace (“Dog bites man”) and concentrate on the unusual or unexpected (“Man bites dog”). It might be argued that corruption in the

Lack of disclosure

Morton in his article mentions two of my PhD students, both studying the vaccination issue, implying that there is some pattern in my supervision. However, Morton does not reveal a pattern in his own involvement with the vaccination issue. Before joining *The Australian* in 2012, he worked on the online site Mamamia.com.au, which took a strong pro-vaccination line. In writing for *The Australian*, he had authored one previous article about Judy and had pursued other articles about her. In his time with *The Australian*, Morton had a track record of trying to paint critics of vaccination in a bad light¹⁸ — but did not reveal anything about his own involvement with the issue.

Guilt by association

The opening paragraphs of Morton’s article read as follows.

The University of Wollongong paid for one of its PhD students with anti-vaccine views to attend an overseas scientific conference organised by a group known for unethical practices and questionable screening of participants.

Arts student Judy Wilyman received \$3000 to attend the 3rd World Congress on Cancer Science and Therapy in October last year, according to documents released by the university under the NSW Government Information Public Access Act and obtained by *The Australian*.

The conference was organised by the OMICS Group, which has been called out by academics for using the names of notable researchers on its editorial board without permission and for naming its meetings as close as possible to reputable conferences held by scientific societies.

pharmaceutical industry has been around for so long and is so entrenched that it is not newsworthy. On the other hand, many members of the public remain unaware of the scale and pervasiveness of abuses within the industry. They are also largely unaware of media-management strategies used within the industry. See for example Sergio Sismondo, “Ghosts in the machine: publication planning in the medical sciences,” *Social Studies of Science*, vol. 39, no. 2, April 2009, pp. 171–198.

¹⁸ See, for example, Rick Morton, “Anti-vaccine group struggling for new ID,” *The Australian*, 2 January 2014, p. 3. Note that Morton’s articles on vaccination are only a small proportion of his stories published in *The Australian*.

The article refers to criticisms of the Omics Group for unethical practices. However, Morton does not claim — nor has anyone else provided any evidence — that the conference Judy attended was itself deficient in any way. The Omics Group organises lots of conferences. If some of them have shortcomings, as has been alleged, this does not mean others do as well. To suggest otherwise is to use the technique of guilt by association.

This technique might be applied to Morton, as follows. He writes for *The Australian*, a newspaper owned by News Corporation, employees of which were exposed for unethical and illegal practices in hacking into private phone accounts, among other things. Does this imply *The Australian* is implicated? Of course not. Does it imply that Morton's articles are necessarily tainted? Of course not. Yet this is the sort of implicit logic behind Morton's reference to alleged problems with Omics as somehow discrediting a student's attendance at an Omics-organised conference.

HPV issues

The next paragraphs of Morton's article are:

Ms Wilyman, who has claimed vaccines are linked to autism and the vaccine against the human papillomavirus is not safe, presented a paper she had written that asserted HPV vaccination programs are not cost-effective.

Ms Wilyman did not respond to a request for comment.

Two strains of HPV cause about 70 per cent of cervical cancer and are implicated in oral and anal cancers. HPV vaccines prevent infection from these strains.

In these paragraphs, Morton gives only a taste of the issues covered in Judy's paper, without sufficient detail to indicate the basis of her critique.¹⁹ Next is this correct statement:

¹⁹ Judy Wilyman, "HPV vaccination programs have not been shown to be cost-effective in countries with comprehensive Pap screening and surgery," *Infectious Agents and Cancer*, 8:21, 12 June 2013, <http://www.infectagentscancer.com/content/8/1/21>. Some of the key points in this article are that HPV infection on its own does not cause cervical cancer, that the long-term risks of the vaccine remain to be determined, that the vaccine only protects against 2 of 15 high-risk HPV strains and hence Pap screening will still be needed by vaccinated women.

Ms Wilyman's supervisor, social sciences professor Brian Martin, lent his support to her bid for funding, writing: "Judy has been making good progress on her thesis."

Memberships

Then comes a sentence beginning:

Professor Martin is a former paid member of the anti-vaccine Australian Vaccination Network and ...

This is misleading. In researching SAVN's attempt to shut down the AVN, I wanted to obtain copies of the AVN's magazine *Living Wisdom*, so I subscribed. I wasn't aware at the time that this automatically made me a member of the AVN. Morton's statement, without explanation, will imply to many readers that by becoming a "paid member" I was endorsing the AVN. However, subscribing to an organisation's magazine is very far from an endorsement, especially when it requires no commitment to the organisation's aims or methods.

Despite the trivial significance of a magazine-subscription-generated membership, some SAVNers have been harping on it ever since they learned about it. Morton has used one of SAVN's standard techniques of trying to discredit me.

SAVN was set up by members of the Australian Skeptics, an organisation that zealously defends orthodox science and attacks alternative views, such as parapsychology, homeopathy and criticism of vaccination. The magazine of the Australian Skeptics, titled *The Skeptic*, has had many articles attacking the AVN and recounting the efforts of SAVNers against the AVN. Therefore I was surprised to find that by subscribing to *The Skeptic*, one automatically becomes a member of the Australian Skeptics.²⁰ This magazine-subscription-membership connection is exactly the same as the AVN's. Yet SAVNers have never mentioned this stated policy of *The Skeptic*.

²⁰ According to the group's website, "To join Australian Skeptics, subscribe to our quarterly magazine the Skeptic or contact one of the many active Skeptics groups and activities around the country." Australian Skeptics, "How to join," <http://www.skeptics.com.au/about/how-to-join/>.

Beginning in the mid 1990s, I subscribed to a US magazine also titled *The Skeptic*, one with a much larger circulation and reputation than the Australian version.²¹ Recently I discovered that by subscribing to the US magazine *The Skeptic*, I automatically had become a member of its parent organisation, the Skeptics Society. Morton, later in his article, stated “Professor Martin ... says he is also a member of the pro-vaccine Skeptics Society.” He does not mention that my formal relation to the Skeptics Society is just as tenuous as it is to the AVN, amounting to no more than a magazine subscription.

Supervision

The article continues:

[Professor Martin] ... previously supervised a student, Michael Primero, who has links to Andrew Wakefield, who sparked a worldwide scare by linking the measles, mumps and Rubella vaccine to autism.

Mr Primero, as recently as 2011, counted himself as a senior editor of a conspiracy-driven publication called *Medical Veritas*, which included Dr Wakefield as either an editorial board member or contributor.

Mr Primero also listed himself as a director of Medical Veritas International.

Professor Martin said he was “not aware” of the connection between Mr Primero and Dr Wakefield ...

The relevance of my supervision of Michael Primero is not immediately obvious to a story about a university paying for a different student to attend a conference. I supervised Michael’s PhD from 1999–2002. His official topic was “The ‘politics’ of vaccination: a scientific controversy analysis”; Michael also had other interests besides vaccination. However, due to other commitments, he discontinued his candidature. Subsequently I only heard from Michael every few years, and hadn’t kept up with his activities.

²¹ I even had an article published in the US magazine: “Contested testimony in scientific disputes: the case of the origins of AIDS,” *The Skeptic*, Vol. 13, No. 3, 2007, pp. 52–58.

Morton says Michael “has links to Andrew Wakefield.” I pointed out to Morton, in our conversation prior to publication of his article, that common membership of an editorial board may say little or nothing about shared views. Morton gives no evidence of a substantive link between Michael and Wakefield,²² nor any for his label “conspiracy-driven” concerning the journal *Medical Veritas*.

Morton’s apparent purpose in mentioning Michael was to suggest that I have a track record of supervising students studying the vaccination issue, and to imply some sort of association with Wakefield and *Medical Veritas* via a former student. To achieve this, Morton conveniently ignored the full spectrum of my supervisory experience, all publicly available on my website.²³ I have been supervisor for 35 PhD students, of whom 20 have graduated, 9 discontinued and 6 are current.²⁴ A casual inspection of the students’ thesis topics shows a wide diversity, including quite a few addressing controversial scientific issues. Two of my students, for example, studied debates over nuclear power. Morton creates an impression of a special interest in vaccination by not mentioning the full spectrum of students’ topics.

Morton also failed to mention that I do not have strong views about vaccination, as repeatedly stated in my publications on the vaccination controversy.²⁵ Within the field of science and technology studies, there is a tradition of research on controversies in which, on many occasions, scholars do not have a personal position on the issue but

²² After Morton’s article appeared, Michael contacted me. Among other points, he noted that during his PhD candidature we had never discussed his association with *Medical Veritas* and that he has never had direct contact with Andrew Wakefield.

²³ “Brian Martin: PhD student supervision,” <http://www.bmartin.cc/others/supervision.html>. Incidentally, I have never heard of another supervisor who lists all PhD students supervised, including ones who did not complete their degrees. Morton took advantage of my online information about supervision by selecting only what served his agenda and not mentioning anything else.

²⁴ Most of these were University of Wollongong students for whom I am or was principal supervisor, plus a few students at other universities for whom I was a key external supervisor. For some of the students, I was supervisor for only part of their candidature. I have not counted students at the University of Wollongong for whom I have been an associate supervisor but not the principal supervisor.

²⁵ “Debating vaccination”; “Online onslaught: Internet-based methods for attacking and defending citizens’ organisations,” *First Monday: Peer-Reviewed Journal on the Internet*, 17(12), 3 December 2012, <http://firstmonday.org/ojs/index.php/fm/article/view/4032/3379>.

want to understand the dynamics of the controversy.²⁶ Morton ignored my writings on controversies,²⁷ instead being intent on painting me as an opponent of vaccination.²⁸ He implicitly questioned the legitimacy of research in the field of controversy studies by putting quote marks around the word “controversies”.

Guilt by association operates by juxtaposing two entities, one of which is stigmatised, with the implicit suggestion that the stigma also attaches to the other entity. Morton does this by referring to just two of my PhD students, one of whom is publicly critical of vaccination, with the implication that I am a critic of vaccination. However, there is a gap in the logic here: Morton should not assume that I necessarily agree with the views of my students. My task as supervisor is to assist them to develop their research skills, something that does not require us to share beliefs.

Would he apply a similar implicit logic to other professions with relationships analogous to supervisor-student, such as lawyer-client or physician-patient? Would it make any sense to suggest a lawyer is tainted by having two clients with dangerous beliefs or that a physician is tainted by having two patients with stigmatised conditions?

Supervising students studying the vaccination issue is legitimate academically and, in my case, does not involve a conflict of interest. Contrast this to the thousands of academics and research students who are in blatant conflicts of interest because they receive funding from companies to study company products, services or marketing strategies.

Other remarks

The next part of the article is as follows:

[Professor Martin] defended Ms Wilyman’s trip.

²⁶ The complications that can arise from doing a “symmetrical” analysis of a public controversies were canvassed in Pam Scott, Evelleen Richards and Brian Martin, “Captives of controversy: the myth of the neutral social researcher in contemporary scientific controversies,” *Science, Technology, & Human Values*, Vol. 15, No. 4, Fall 1990, pp. 474–494.

²⁷ Available on my website: “Brian Martin: publications on scientific and technological controversies,” <http://www.bmartin.cc/pubs/controversy.html>.

²⁸ To reiterate: I am neither a proponent nor an opponent of vaccination. My primary interests in the vaccination issue are to defend free speech in the public debate and to understand strategies used in scientific controversies. See my book *The Controversy Manual* (Sparsnäs, Sweden: Irene Publishing, 2014).

“Reputation isn’t the only basis to judge a conference,” he said. “I am satisfied it was a valuable experience for Judy.”

Professor Martin, who studies scientific “controversies”, says he is also a member of the pro-vaccine Skeptics Society.

The OMICS Group could not be reached for comment.

The freedom of information application was lodged by medical doctor Thilini Mahaliyana.

“This is a disease that still kills now and I have seen many patients who have been affected by HPV and cervical cancer in my years as a doctor,” Dr Mahaliyana said.

“We now have the ability to prevent people from losing their daughters, sisters, mums, friends with what is an incredibly safe, effective and cost-effective vaccine. I believe ... we need to scrutinise the anti-vaccination movement.”

Morton refers to documents about Judy’s conference attendance obtained using a freedom-of-information request by Thilini Mahaliyana, and generously devotes two paragraphs to quotes from her, even though she is not identified as having done any research concerning HPV.²⁹

However, Morton apparently found very little in the documents that he could use in the article. The fact of Judy’s attendance was known publicly months earlier. Apparently the only titbit he was able to extract from the documents was my comment, on Judy’s application for conference funding, that “Judy has been making good progress on her thesis,” quoted earlier in his article.

He could have, but didn’t, state that the documents reveal that Judy and the university followed all proper procedures in the funding application. At the end of his article is this sentence:

A spokeswoman for the University of Wollongong said: “The university does not interfere with the content of conference presentations and we uphold the

²⁹ Morton could have, but didn’t, quote from Judy’s article on the HPV vaccine published in *Infectious Agents and Cancer* (cited above) or from information on her website Vaccination Decisions, <http://www.vaccinationdecisions.net/>.

principles of academic freedom for staff and students, even when the views expressed are contrary to views of individuals in the university.”

However, Morton did not include all the text from the university’s official statement prepared specifically for him following his emailed questions. The initial sentences, which he omitted, read:

We encourage students to attend and present at conferences, in order to develop their academic skills and networks. We are satisfied that in this case the correct procedure was followed in relation to conference attendance being approved by the student’s supervisor.

Conclusion

In summary, Morton’s article displays several types of bias.

1. Choice of topic. Morton chose to look at what he implied were problems with conference attendance by a student critical of vaccination, but he did not mention much larger and systemic problems among groups supportive of vaccination. Morton referred to two of my PhD students without mentioning that I have supervised 33 others. This is a case of double standards via choice of a topic to report on.

2. Lack of disclosure. Morton in his article made a great deal about my supervision of two students studying the vaccination issue, but did not reveal his previous involvement with the issue.

3. Guilt by association. By associating me with critics of vaccination,³⁰ Morton implied I am a critic of vaccination, and did not mention published statements to the contrary. By mentioning allegedly dodgy dealings by the conference organiser Omics, Morton implied, without any evidence, that the conference Judy attended was itself dodgy. By mentioning that Michael Primero and Andrew Wakefield are on the same editorial board, Morton implied they have some substantial connection. The basic technique used here is to juxtapose facts in a way that implies a discrediting association, without ever stating or justifying the implication.

³⁰ Specifically, with Judy and with Andrew Wakefield (via my former student Michael Primero).

4. Loaded labelling. Morton called a publication “conspiracy-driven” without any evidence or justification for the label. He put quotes around “controversies” when referring to my research on scientific controversies.

5. Selective quotations. Morton referred to “the connection between Mr Primero and Dr Wakefield” but failed to mention my comments to him that shared editorial board membership need not imply any personal or ideological connection. Morton quoted one sentence from the university’s statement but not the other two.

6. Underlying assumptions. Morton’s entire article is built on the assumption that there is something wrong with being critical of vaccination, and that universities should not be funding students for this sort of research. This involves a rejection of the academic tradition of free inquiry.

Several people, who do not follow the vaccination debate, have told me that Morton’s article was obviously biased. So is it really necessary to look in detail at the types of bias involved? This close scrutiny is useful in revealing two main types of bias: those apparent to someone unfamiliar with the topic and those only known to someone who is able to delve more deeply. Bias types 4 and 6 — the loaded labels and underlying assumption that attendance at a conference is somehow newsworthy — will be apparent to some readers. Bias type 3 — guilt by association — can be detected by readers who stop to think about whether the associations mentioned actually have any importance. However, bias types 1, 2 and 5 — choice of topic, lack of disclosure and selective quotations — are not immediately obvious to most readers. Only those familiar with the operations of the pharmaceutical industry and medical profession will realise the double standard of not mentioning their dubious operations. Only those familiar with Morton’s previous writings will realise the double standard in his focus on critics of vaccination. Only a few people in the university have access to the full text of its statement. Only a few people know what I told Morton when he interviewed me.

This is a cautionary tale. News stories can be biased in a wide range of ways, but only some of them are apparent to people unfamiliar with the field and the details mentioned. In this case, the saving grace is that all the biases are in the same direction. Readers who detect bias would be correct in assuming that the article is even more slanted than it seems on the surface.

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