From and to a very grey area

The scandal surrounding the former German Defence Minister Karl-Theodor von und zu Guttenberg, who resigned after facing accusations of plagiarism in parts of his doctoral thesis, raises troubling issues for all of us in academia. Guttenberg was an easy target: first, because he is a well-known politician; second, because his plagiarism was blatant, even though questions remain as to whether there was actual intention to mislead. The successful campaign to remove him from office was heralded as a remarkable victory for academics, who demanded that he acknowledge his mistakes and stand down. Had he not done so, his critics argued, the reputation of the German academic system could have been gravely damaged.

His error was not simply an academic one, like writing the wrong answer in an examination. Serious academic misconduct has wider implications, calling into question whether a person can be trusted with any task, let alone the conduct of public affairs. Politicians who obtained an academic degree by deception should be treated no differently from those found to have fiddled their parliamentary expenses or employed an illegal alien as a housemaid.

Despite Guttenberg's resignation, the case reveals serious flaws in the academic practices not just of Germany, but of all countries. His immediate supervisor, as well as the faculty which conferred his now-withdrawn degree, seem guilty of a dereliction of duty. At the very least, one might have expected that some kind of formal checking procedure would exist, even if it was not followed. But, to my knowledge, such screening is not performed systematically, even though it is common practice for vetting undergraduate work. Disparities between disciplines are also a thorny issue. According to some commentators, Guttenberg's fault was simply to have omitted quotation marks and citations, since quoting at length from other works is

accepted practice in much of the humanities and social sciences.

In molecular biology, where most of the research literature is freely available online, at least for those active in research, the opportunities for such misconduct might seem legion. Yet direct plagiarism is easy to detect using simple text-matching tools, now commonly employed by journal editors and publishers, including ourselves. Where doctoral theses are structured around peer-reviewed articles (co-) authored by the candidate, such safeguards exclude direct plagiarism, although the surrounding thesis, which can vary in size from a few pages to a voluminous work in its own right, still needs to be carefully scrutinized. There is an obvious danger that a lazy student will simply copy and paste chunks of text that have appeared in previous doctoral theses rather than peruse, analyse and crystallize the relevant background literature for himself. In countries where doctoral theses can contain mainly unpublished data and interpretation thereof, comprehensive vetting is required.

Although most faculties have nominal rules regarding plagiarism, implementation is patchy, and regulations have not kept pace with the burgeoning of electronic literature, nor changes in practice. Even journal publishers do not apply uniform standards. I recently heard a case of an editor of a prestigious journal whose attention was drawn to the fact that the introduction section of a paper published in the journal matched almost word for word a passage from a recently published review article. Her response was, 'so what?'. She felt that the substance of the two papers being different negated this supposedly minor fault.

Self-plagiarism is a particularly grey area, even though most would consider it unacceptable in a doctoral thesis. A number of years ago, I was reading the draft of a PhD thesis from one of my own students, whose written English was poor. Virtually the entire

text appeared to have been processed from the original Hungarian, using an early version of the Google translator. But suddenly, when I reached the second paragraph of the Discussion, I encountered a long passage written in grammatically impeccable, if slightly clunky English prose. Further analysis quickly confirmed my initial suspicion: I myself was the authors of this haplblock of text. At my insistence, she re-wrote the entire Discussion, and finally understood that the object of the exercise was not to produce a 'perfect' thesis, but to produce her own thesis. In the end, it was well appreciated by her examiners.

Not all such cases are so clear-cut. Paraphrasing of someone else's – or one's own – 'perfect' text is generally considered to be plagiarism just as serious as copy-pasting: arguably more so, since it reveals a blatant attempt to deceive. But it can hardly be avoided in some portions of a scientific dissertation: for example, there are only so many ways of stating that DNA was recovered by precipitation with two volumes of ethanol, followed by centrifugation.

Where does all this leave us? I believe we need to devise a universally agreed code of practice, accompanied by clear vetting procedures that specify the responsibility of the supervisor, the department and faculty in the process. Of course, we have not reached a globally accepted definition of what actually constitutes plagiarism, nor even what is a PhD. But, as in many areas of academic life, there is a serious danger that if we don't do it ourselves, some ghastly state bureaucracy will end up forcing us to do it 'their' way.

To protect the identity and reputation of third parties, some 'facts' in the above account have been deliberately falsified.

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