

Reviewing a scientific book isn't science ?

"Conquest of the Plane" and scientific integrity versus misrepresentation and slander

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Advised reading: <http://boycottholland.wordpress.com/2014/06/04/if-holland-were-just-a-bit-nicer-and-more-competent> and *What a mathematician might wish to know about my work:*
<http://thomascool.eu/Papers/Math/2013-03-26-WAMMWTKAMW.pdf>

Summary

The book *"Conquest of the Plane"* (COTP, 2011) re-engineers mathematics education. It uses the critique on traditional mathematics education given in *"Elegance with Substance"* (EWS, 2009). The PDFs are on their websites. Two book reviewers of EWS and/or COTP advised to read COTP with an open mind. A "review" by Jeroen Spandaw (TU Delft) however misrepresents the analysis and is slanderous. My suggestion to Spandaw to talk about this was rejected. A subsequent appeal to the TU Delft Commission on Scientific Integrity resulted in their decision in 2012 that book reviews are not at issue in the rules on scientific integrity, or alternatively that the supposed breach was so minor that it didn't justify an effort to look deeper into the matter (with an actual investigation). An appeal to the national supervising integrity body LOWI of the Royal Dutch Academy of Sciences KNAW confirmed this Delft verdict in 2014. A somewhat later report by Christiaan Boudri (Arnhem-Nijmegen) in 2013 reacted to Spandaw with the repeat advice to read with an open mind. The integrity committees regarded this as too late, whence it had no impact. It is amazing that the committees on integrity of science think that reviews of scientific books are not part and parcel of science. When scientists discuss the works of other scientists (listed in their references) then there are standards of fair representation and common decency. Why would those standards not apply to book reviews as well ? Spandaw's "review" is in Dutch. My discussion and protest of June 11 2014 is in English. At no time the freedom of expression of a scientist is at issue here. If Spandaw is not convinced by COTP he is free to say so. At issue is only that you don't misrepresent and slander and you don't accept it from others. The best approach remains that others read EWS and COTP. It is unfortunate that there now is the added burden to have to think about whether you support the misrepresentation and slander or not. All this might perhaps be beneficial for the discussion on mathematics education. Mathematics education might be better than in the year 0 but is rather dismal compared to what is possible. More discussion of EWS and COTP will help to get an improvement. Traditional mathematics educators like Spandaw think that they defend quality but they close their minds to the wonderful results that are possible when we re-engineer the traditional lores that we teach our students.

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Introduction

The Royal Dutch Academy of Sciences (KNAW) has an Office of Scientific Integrity (LOWI).¹

In Februari 2012 dr. Jeroen Spandaw of TU Delft published a misrepresenting and slanderous "review"² of my book *Conquest of the Plane* (COTP, 2011).³ The text is in Dutch and was published in the journal *Euclides* of the Dutch teachers of mathematics.⁴

I fully respect scientific freedom of expression. I want to enjoy that freedom myself and defend this for others. Naturally I object to unfair representation, as I hope that others do too. Also when researchers publish their own original research, they must refer to research by others too, and then represent this in a fair manner. The same criterion of fair representation holds w.r.t. book reviews too. A misrepresenting and slanderous review is a breach of scientific integrity.

I tried to find ways to resolve the issue, like an invitation to Spandaw to discuss the issue and perhaps have others moderate the discussion. There was no co-operation on this, neither from the editors of *Euclides* nor from the Board of the association of teachers NVVW. Eventually I saw no other way than to submit the case first to TU Delft and subsequently to LOWI. While this procedure was running, dr. Ch. Boudri read COTP, was amazed by Spandaw's review, and advised fellow teachers of mathematics in NVVW to read with an open mind.⁵ However, Boudri's text was neglected in said procedure as too late, see below.

LOWI's verdict was on April 24 2014 and will be on their website, turned anonymous.⁶

LOWI upholds the freedom of Spandaw to write as he did. Neither TU Delft nor LOWI investigated the "review" on the misrepresentation and slander but they hold that book reviews do not fall under "scientific integrity", or alternatively that the issue is minor and doesn't warrant the effort to look into it deeper.

I cannot disagree more. Misrepresentation and slander cannot be covered by scientific integrity. If the issue would be minor then this can only be determined by actually looking in it: and then it would show that it is not minor.

In this situation, I see no other way than to take a public stand against both the original misrepresentation and slander and the lack of protection against this. I can only do this:

- 1) to recall why Spandaw's "review" is misrepresenting and slanderous
- 2) to recall why the issue needs resolution: it is important for mathematics education
- 3) to make known that I have submitted a protest first to TU Delft and subsequently to LOWI
- 4) to help you identify which of the LOWI anonymised verdicts is the relevant one (this you should be able to find yourself anyhow)
- 5) given anonymity: to put my own texts, in which references to other people than dr. Spandaw have been made anonymous too as far as relevant, on my website
- 6) given anonymity: to make all documents available only to researchers in the integrity of science who are willing to respect the anonymity in the TU Delft and LOWI procedures
- 7) given anonymity: to give some quotes below merely from the logical argumentation.

The following will discuss why the case is important, what errors are made by TU Delft and LOWI, and why there is that extra complexity of anonymity. The misrepresentation and slander are out and loud in the open but trying to get decency creates the sensitivity of judging human conduct.

¹ <https://www.know.nl/nl/thematisch/ethiek/landelijk-orgaan-wetenschappelijke-integriteit-lowi/overzicht>

² <http://thomascool.eu/Papers/COTP/2012-02-13-Colignatus-reactie-op-Euclides-87-4-p168-170.html>

³ <http://thomascool.eu/Papers/COTP/Index.html>

⁴ <https://www.nvww.nl/10179/euclides>

⁵ <http://thomascool.eu/Papers/COTP/2013-03-15-Boudri-over-COTP.pdf>

⁶ <https://www.know.nl/nl/thematisch/ethiek/landelijk-orgaan-wetenschappelijke-integriteit-lowi/adviezen-lowi-vanaf-2007>

An important point is that science relies on peer-review and not on legal procedure. I expected to be invited by TU Delft for a personal discussion with peers to resolve the issue. I actually expected a blackboard. I was much amazed that they turned it into this litigation. At the same time the legal framework for scientific integrity is weak so that protection is weak as well.

Is there a scientific controversy ?

In itself is is nice that LOWI verdict 5.2 p7 writes:

"In the judgement of LOWI there are scientific differences of opinion and insight, hence a scientific controversy."

In a worse situation, LOWI might also have concurred with Spandaw that COTP is nonsense. LOWI may not really know since nobody in this procedure checked the math (at least formally). The positively minded reviews by Gill and Gamboa and the memo by Boudri will cause caution. Thus we might assume tentatively that LOWI really agrees that there is a scientific controversy. Rejoice: there is a scientific controversy, and since I put the argument forward in EWS and COTP, it is now the task of others to try to see whether they get the argument or whether I made some error. As always, if you don't understand something, first ask questions. ⁷

Still, when LOWI agrees that there is a controversy, why does it accept misrepresentation and abuse of language by Spandaw, and why does it assume that an author has to accept that ?

The position by LOWI does not make sense on the key issue. When we look into the details, the situation becomes even worse, since they uphold the overall inconsistency by a string of errors.

PM 1. In itself, it might have been possible that TU Delft had set up an investigation committee and packed it with traditionally minded mathematicians, who could have concurred with Spandaw, after which COTP would have been buried, and my only solution would have been to emigrate. Thus, on the scale from bad, worse, worst, perhaps the current outcome isn't so bad at all. Still, it is important to develop below what went wrong at TU Delft and LOWI.

PM 2. The American Mathematical Society lists books on mathematics excluding textbooks. COTP presents a new approach but uses the format of a primer (textbook). It should have been listed by AMS because of what it does, but unfortunately the editor at AMS attached more importance to the layout. See the Appendix.

Why the case is important

The case is important because COTP presents an innovation in mathematics education. See the book's website and its companion book *Elegance with Substance* (EWS) (2009). ⁸ The PDFs are on the websites. Dutch readers are referred to my advice to a parliamentary enquiry. ⁹ Please note that I am not only a mathematics teacher but also an econometrician, and that EWS also discusses the political economy of the mathematics industry.

Spandaw's review is only in Dutch, and Holland is a small country. One might think that it would be better to focus on the international community and try to find open minded teachers of mathematics there. However:

(a) Holland is where I live,

⁷ <http://boycottholland.wordpress.com/2014/06/04/if-holland-were-just-a-bit-nicer-and-more-competent/>

⁸ <http://thomascool.eu/Papers/Math/Index.html>

⁹ <http://www.ipetitions.com/petition/tk-onderzoek-wiskundeonderwijs/>

- (b) Other people in the math community Holland may have better international contacts than I do. Foreigners will ask for information from their Dutch contacts. Think for example of the Freudenthal Institute ¹⁰ or the representative of the Dutch PWN to ICMI. ¹¹

The *Dutch Platform for Mathematics (PWN)* ¹² unites various mathematical organisations. Recently, it had Deloitte (accountancy, tax advice, consultancy) write a report "*Mathematical sciences and their value for the Dutch economy*", January 2014. ¹³ See the report in English. ¹⁴ The claim is that 25% of all jobs and 30% of GDP in Holland depend upon mathematics in important manner. PWN suggests that mathematics education *therefor* would be important.

Dutch state officials have had years of training to see the beauty of mathematics, and now bad education must be repaired by this kind of report? PWN thinks that the Ministry of Economic Affairs would not see by itself that mathematics is important, so that officials have to be educated via PWN and this report. PWN apparently receives subsidies to outsource that kind of report. The problem is rather that PWN doesn't tell the Ministry what the real problem is.

When you reduce mathematics to economic use, then you reduce its philosophical and intellectual value. We work to live, and don't live to work. But it is awkward to hold that we live to do mathematics or do mathematics to live. Thus, see EWS for a balanced approach why mathematics education is important and why it better be changed and why each democratic country needs a parliamentary enquiry on this.

PWN blocks discussion of my books EWS and COTP.

I don't know whether they refer to Spandaw's "review" for doing this but clearly they don't refer to the other positive reviews. It is clearly obstruction by PWN that they have not asked Deloitte to speak with me on an alternative view supported by economic theory.

I have had no contact with Deloitte when they prepared this report. EWS from 2009 is not in Deloitte's references. They refer to their similar UK study of 2012, and it is clear that the UK will not benefit from the information that is blocked here in Holland (i.e. that mathematics education better be re-engineered).

Mutatis mutandis on the Freudenthal Institute.

Finally, I am an econometrician who also presents an analysis on unemployment. ¹⁵ In that realm I already have to deal with misrepresentation and slander from the Ministry of Economic Affairs. Dutch readers may look at this other advice to a parliamentary enquiry. ¹⁶ Surely, if some mathematicians argue that my analysis on the didactics of mathematics "is no good either", then the situation becomes pretty grim. However, mathematics at this level of discussion is easier to check than econometrics in that other analysis. If we can get rid of the misrepresentation and slander by Spandaw, then I expect a positive response for the education of mathematics, hopefully for the world at large. Subsequently, the Dutch Ministry of Economic Affairs might wonder whether they made the same kind of error with respect to my analysis on unemployment. I just mention the links. Don't let your view on economics guide your view on mathematics education, and conversely. This statement of interest is only to warn you that sloppiness in one realm can have surprising consequences in another realm.

¹⁰ <http://www.fisme.science.uu.nl/fisme/nl/>

¹¹ <http://www.mathunion.org/>

¹² <http://www.platformwiskunde.nl/default.htm>

¹³ [http://www.platformwiskunde.nl/files/documenten/Persbericht%20Wiskunde%20nodig%20om%20arbeidsmarkt%20te%20redden%20\(10-4-2014\).pdf](http://www.platformwiskunde.nl/files/documenten/Persbericht%20Wiskunde%20nodig%20om%20arbeidsmarkt%20te%20redden%20(10-4-2014).pdf)

¹⁴ <http://www.platformwiskunde.nl/files/documenten/Deloitte%20rapport%2020140115%20Mathematical%20sciences.pdf>

¹⁵ <http://boycottholland.wordpress.com/2014/06/04/if-holland-were-just-a-bit-nicer-and-more-competent/>

¹⁶ http://www.ipetitions.com/petition/pe_werk_cpb/

Why not all documents are made public

The LOWI rule is that not all documents but *only verdicts are published*, and turned anonymous. The TU Delft Board adopts that rule and has declined to make the supporting materials public.

This rule is generally sensible, since researchers can be much affected by public judgements on scientific integrity. People must be treated as innocent until proven guilty, and when judged guilty then they should generally be allowed to learn from experience and improve conduct without continuous reminder of past errors.

Indeed, as I attach such great value to scientific integrity, one ought to expect from me that I treat others at least as careful.

Still, I am confronted with a misrepresentating and slanderous review that will be a continuous reminder and that cannot be undone easily. Spandaw did not treat me with similar care but targetted that his text should be available permanently to stop people from reading COTP.

Also, while the LOWI verdict doesn't expose the errors made in the earlier phases by TU Delft it somewhat also creates its own errors. To check all of this, one needs all documents. Thus there is a reason to make all documents public.

Given that it is already in the public realm that Spandaw published that "review" and that I have protested against it, turning the verdict anonymous is only relevant for the other people who have been involved in the procedure, notably the officials at TU Delft who allowed the misrepresentation and slander to persist as well.

I have no clear opinion about whether committees on scientific integrity should be anonymous or not. The names of the persons in the TU Delft Committee on Scientific Integrity and their secretary are on the internet.¹⁷ That I now protest against the error made at TU Delft doesn't cause that from being public they now should be anonymous. In other cases there are double-blinded peer-reviews though.

However, one can imagine that procedures would be much burdened if officials would feel constantly watched, so that they might forget about procedure and instead start focussing on public opinion. In this case I don't think that it really applies. That is, the misrepresentation and slander about a book on mathematics education seems different from an issue like a trial on Probiotica¹⁸ or the explosion of the Space Shuttle Challenger.¹⁹ The irony is that I would like to see that it mattered more (and I have indicated this in the above).

Nevertheless, it seems fair that LOWI and TU Delft adopt the rule that their procedures are internal except for the publication of an anonymised verdict. Since I submitted a case for that procedure, I should stick to that rule.

Hence, the seven steps given in the *Introduction* above are a good approach for respecting the LOWI rule and still allowing researchers in integrity the opportunity to study the case and report on it, when they are willing to respect the anonymity as well.

PM 1. In that period from 2012-2013 my website was relocated from dataweb.nl to thomascool.eu. Since I now adapt my texts to anonymise them, I will transfer those internet links too.

¹⁷ <http://www.tudelft.nl/over-tu-delft/strategie/integriteitsbeleid/wetenschappelijke-integriteit/commissie-wetenschappelijke-integriteit/>

¹⁸ <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9574.2008.00411.x/abstract>

¹⁹ http://en.wikipedia.org/wiki/Rogers_Commission_Report

PM 2. Most text are in Dutch. The first round with TU Delft is in Dutch. In the second round I appealed to LOWI using English. As I wasn't adequately listened to by TU Delft, I anticipated that I might have to explain to foreigners how scientific integrity is dealt with in Holland. Fortunately LOWI accepted that English text. It was replied to in Dutch again, with the argument that this would be legally required. As said, the legal framework for scientific integrity is weak, and now this weakness shows up in some impediment against translation to the international world, even though Holland wants to belong to the European Union and as if the scientific use of English hasn't occurred yet.²⁰

The errors by TU Delft

A key error by TU Delft is that they did not invite me for a hearing and that they did not invite a team of mathematically able experts to judge on the misrepresentation and slander in the "review".

There is a rule that a case doesn't require investigation when it is "obvious" that such is useless. It is useful to have some protection against silly cases, so that you don't have to spend hours on handling a case such as when someone claims to have discovered that the Earth actually is flat. Would COTP fall into that category? Well, the two reviewers Richard Gill and Jose Manuel Gamboa already gave the positive advice to read with an open mind. The TU Delft Commission was informed about those reviews. Thus the case is open, and the TU Delft Commission should not jump to conclusions that they know it better. The rule can easily be abused. Thus:

If we investigate it, then it will appear that an investigation isn't useless.
If we don't investigate it, then we can argue (blindly) that it is useless.

Thus this is a sick rule. The rational approach and solution is to see that it is not a binary question. It is not a matter of yes / no investigating all of it. You can investigate a selection of elements. In this case, you don't have to decide on who is right in terms of the underlying issues in math education, but you only need to check whether the "review" was done properly or indeed is misrepresenting and slanderous.

It is easy to see that the "review" wasn't done properly, since for example Spandaw doesn't present my new definition for the derivative, so his readers still don't know why he rejects it and starts using abusive language.

Most of all: this concerns mathematics education:

The most amazing aspect in this procedure is that neither TU Delft nor LOWI asked other mathematically able persons for a view. Please note that COTP is critical of standard mathematics education. Thus one needs to find people with an open mind, while there may also be physicists or other econometricians. I will not argue that it would help to have some Richard Feynman like on the Rogers Commission, but of course it would help.²¹

We can quote the TU Delft and LOWI reports on their logical argument. Dutch can be in the left column and my English translation is on the right.

²⁰ <http://boycottholland.wordpress.com/2012/03/10/spinoza-and-the-crazy-centuries/>

²¹ http://en.wikipedia.org/wiki/Rogers_Commission_Report

Some subtleties in Dutch might be lost in translation. Some subtleties already arise in Dutch when the verdict by the TU Delft Commission is interpreted by the TU Delft Board.

<i>Dutch</i>	<i>My translation into English</i>
<p>(A) TU Delft Commissie Wetenschappelijke Integriteit (CWI) 2012-11-08:</p> <p>(...)</p> <p>3.4 (...) Naar het oordeel van de Commissie valt een vermeende lasterlijke boekbespreking niet binnen de termen van schending van de wetenschappelijke integriteit.</p> <p>3.5 Primair is de Commissie van oordeel dat deze klacht buiten haar bevoegdheid valt.</p> <p>3.6 Subsidiair (...) Indien de gedraging wel onder een inbreuk van wetenschappelijke integriteit zou zijn te scharen, bijvoorbeeld dat onvoldoende zorgvuldigheid of respect is betracht, (...) dan beschouwt de Commissie dit als een te geringe inbreuk, die een inhoudelijk onderzoek niet rechtvaardigt (...)</p> <p>3.7 Het vermoeden dat de beklagde bewust en opzettelijk (zeer) onzorgvuldig te werk is gegaan acht de Commissie dus op voorhand onvoldoende onderbouwd en niet aannemelijk. Een overweging is daarbij dat een recensent in het algemeen een grote (grondwettelijke) vrijheid geniet om zijn (persoonlijk) oordeel over het werk van derden kenbaar te maken. Voorts dat een discussie, waaronder een recensie, in de academische wereld gebruikelijk is. Daarbij staan voor klager voldoende middelen open om zich in deze discussie te mengen en zijn mening over de recensie van zijn boek te geven. Dit is geschied, zoals klager zelf aangeeft, op het forum van het tijdschrift Euclides en op zijn eigen website.</p>	<p>(A) TU Delft Commission on Scientific Integrity 2012-11-08:</p> <p>(...)</p> <p>3.4 (...) In the judgement of the Commission an allegedly slanderous book review does not fall within the definition of a breach of scientific integrity.</p> <p>3.5 First of all, the Commission judges that the complaint falls outside its competence.</p> <p>3.6 Alternatively (...) If the conduct would fall under the terms of a breach of scientific integrity, for example having insufficient care or respect, (...) then the Commission considers this as a too small a breach, that doesn't justify an investigation on content (...)</p> <p>3.7 The Commission thus holds from the outset that the supposition, that the defendant would have acted consciously and deliberately in (very) uncaring manner, is insufficiently proven and not likely. A consideration is that a reviewer generally has a lot of (constitutional) freedom to express his (personal) opinion about the work of others. Also that a discussion, amongst which a review, is normal in the academic world. The plaintiff has sufficient means to join this discussion and give his opinion about the review of his book. This has happened, as the plaintiff acknowledges, on the forum of the journal Euclides and on his own website.</p>
<p>(B) TU Delft College van Bestuur 2012-12-04:</p> <p>Wij nemen het advies van de Commissie over, inclusief de in het advies gegeven motivering. Dit betekent, dat wij de door u bedoelde boekbespreking niet rekenen tot een schending van de wetenschappelijke integriteit c.q. als een zodanig geringe inbreuk die een inhoudelijk onderzoek niet rechtvaardigt.</p> <p>(TC: Op zichzelf een kromme zin.)</p>	<p>(B) TU Delft Board 2012-12-04:</p> <p>We adopt the advice by the Commission, including the motivation given in the advice. This means that we do not reckon the review that you mentioned as a breach in scientific integrity or alternatively as such a small breach that does not justify an investigation on content.</p> <p>(TC: In itself a crooked sentence.)</p>
<p>(C) TC: Zie het subtiele verschil tussen 3.5 "niet bevoegd" en het CvB: "niet rekenen tot een schending" waarbij dat laatste ook gelezen kan worden als een inhoudelijk oordeel.</p> <p>In 3.6 wordt expliciet aangegeven dat men niet naar de inhoud heeft gekeken. Gelukkig geeft</p>	<p>(C) TC: See the subtle difference between 3.5 "outside of competence" and the Board: "do not reckon (...) as a breach" where the latter might also be read as a judgement on content.</p> <p>Paragraph 3.6 explicitly states that one did not look at the contents. Fortunately, the Board in</p>

<p>het CvB aan in het zinsdeel na "c.q." dat men niet naar de inhoud heeft gekeken.</p> <p>Bij die inhoud gaat het om misrepresentatie en laster, niet om een oordeel over onderwijs in wiskunde.</p> <p>Per saldo wordt gewoon gesteld dat een boekbespreking niet aan de orde is in de Notitie van het LOWI over wetenschappelijke integriteit.</p>	<p>the part after "alternatively" indicates that one did not look at the content.</p> <p>That content would concern misrepresentation and slander, and not a judgement on mathematics education.</p> <p>In sum, it is merely stated that a book review is not at issue in the Memo by LOWI on Scientific Integrity.</p>
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The Rector Magnificus of TU Delft argued in 2014 that the response by dr. Ch. Boudri in 2013 isn't relevant since "the" decision was already made on December 4 2012.

<i>Dutch</i>	<i>My original English</i>
<p><i>Het citaat rechts:</i></p> <p>"In elk stadium van de klachtenprocedure kan de procedure worden stopgezet als er een oplossing wordt gevonden waarmee de klager genoegen neemt. Hierdoor wordt een snelle en informele afhandeling van klachten mogelijk."</p>	<p>(D) Colignatus to LOWI 2014-02-27 and forwarded to TU Delft:</p> <p>In my letter to you of November 29 2013 I provided additional information of the events after the "review" was published in 2012 and my complaint of July 7 2012, also outside of TU Delft. This was intended to provide context. The "Regeling wetenschappelijke integriteit TU Delft" contains the option for a fast resolution. In the "Toelichting" of "Artikelen 11, 12, 13": "In every stage of the complaint procedure the procedure can be stopped if there is found a solution that is acceptable to the plaintiff. This allows for a quick and informal solution of complaints." TU Delft (and its complaint committee) could have used this information on context to resolve the case faster. For example, the comments by dr. Boudri on the "review" might have helped. But TU Delft choose the legal position that they only consider my original complaint of July 7 2012. The Rector Magnificus thus neglects the additional information on context. I don't think that this legal attitude is proper in issues of scientific integrity.</p>
<p>(E) TU Delft, Rector Magnificus 2014-03-10:</p> <p>Niet valt in te zien hoe het CvB bij de afhandeling van de klacht op 4 december 2012 rekening kan houden met de daarna (op 29 november 2013) aan het LOWI verstrekte informatie, die betrekking heeft op feiten die zich hebben afgespeeld na afhandeling van de klacht. Zo dateert het commentaar van dr. Boudri, waarop klager wijst, pas van 14 maart 2013. Daarom hebben wij in het verweer opgemerkt dat het in dit stadium niet relevant is om deze beschouwingen in ons verweer te betrekken.</p>	<p>(E) TU Delft, Rector Magnificus 2014-03-10:</p> <p>It is impossible to see how the Board in deciding on the complaint on December 4 2012 can keep account of the information that was supplied to LOWI only later (on November 29 2013), that deal with facts that occurred after the decision on the complaint. The comments by dr. Boudri, that the plaintiff points to, date from only March 14 2013. That is why we have remarked in our defense that it is not relevant in this stage to include those considerations in our defense.</p>

<p><i>Het citaat rechts:</i></p> <p>“Het hoofdpunt is: “bewust verkeerd of tendentieus weergeven van resultaten en onderzoekverslagen van anderen””.</p>	<p>(F) Colignatus to LOWI 2014-02-27 and later forwarded to TU Delft:</p> <p>Thus, they neglected that my letter of July 7 2012 explicitly referred to LOWI notitie 2001 page 7: “The main point is: “consciously represent results and research reports by others wrongly or tendentiously””. The Rector Magnificus just restates this neglect.</p>
<p>(G) TU Delft, Rector Magnificus 2014-03-10:</p> <p>Overigens valt de door klager geciteerde inbreukgrond te categoriseren in de grond "wetenschappelijk wangedrag bij vervalsing van onderzoeksgegevens of machinaties bij het weergeven van gegevens". De grond is dus wel aan de orde geweest. Overigens slaat deze vorm of categorie van inbreuk vooral op het bij eigen onderzoek onjuist gebruiken van andermans onderzoek. Het slaat niet op een boekbespreking, omdat een boekbespreking niet kan worden gezien als een onderzoek met gebruikmaking van gegevens van anderen.</p>	<p>(G) TU Delft, Rector Magnificus 2014-03-10:</p> <p>Moreover, the reason that the plaintiff cites for a breach of integrity can be categorised in the reason "scientific misconduct by falsifying research data/information or machination in the representation of data/information". That reason has been at issue thus for sure. Moreover, this form or category of breach primarily concerns the wrong use of the research by others while doing own research. It does not apply to a book review, since a book review cannot be seen as a research that uses information from others.</p>
<p>(H) TU Delft College van Bestuur 2014-05-26:</p> <p>Het LOWI is van oordeel dat uw klacht in al zijn onderdelen ongegrond is en adviseert ons het definitieve besluit daarom ongewijzigd te laten. Gelet op het voorgaande hebben wij besloten om ons besluit d.d. 4 december 2012 als ons definitief oordeel vast te stellen.</p>	<p>(H) TU Delft Board 2014-05-26:</p> <p>The LOWI judges that your complaint is ungrounded in all its elements and advises us to leave the final decision unchanged. Referring to the above we have decided to establish our decision d.d. December 4 2012 as our final judgement.</p>

Two points:

(1) My point w.r.t. the comments by dr. Boudri are:

(1) Boudri's comments need not be relevant since the TU Delft Commission should have been able to see the point, given the reviews by Richard Gill 2012 and Jose Manuel Gamboa 2011 that I referred to in July 7 2012.

(2) The comments by Boudri are exceptional since his expectations were affected by the misrepresentating and slanderous "review" by Spandaw. His comments of surprise expose the failure of the TU Delft Commission even more. The TU Delft Board should have sent the complaint with the "new" information back to their Commission and should have asked to look at it again. It is a disgrace to science that the TU Delft Board and Rector Magnificus adopt a purely legal position.

(2) That TU Delft distinguishes between "own research" and "book review" is inappropriate. In both cases the same standard applies that you should give a fair representation and maintain decency and that you don't misrepresent and slander.

NB. As I had stated in 2012-07-07: Spandaw was confronted with new insights and for him trying to understand it was actually research in his own field of mathematics education.

The errors overall: see LOWI.

The errors by LOWI

See my appeal to LOWI: the letters in English of 2013-11-29 and 2014-02-27 (anonymised where relevant).

The LOWI report (see elsewhere for the precise website link)²² wisely first reviews LOWI's role and competence. In point 4.1 on page 4 it states that it cannot settle scientific disputes. If something would be wrong then this should be dealt with in the scientific fora like the journals. Scientific integrity is another issue, the difference between *wrong* and *bad*. This is also my position. If Spandaw merely had a different point of view then I would be interested and I might learn from it. What I object to is the misrepresentation and slander.

LOWI also corrects TU Delft on a point in the Tables above, point A 3.5: even a minor breach in integrity would require some action. However, LOWI turns this into a legal correction, that words should be choosed differently. LOWI advises to speak about a minor breach in some *rule* only. This allows that overall integrity is maintained while there might be minor breaches in rules. According to LOWI this further doesn't affect this case.

(1) Is a book review also science or research ?

To a scientist, the distinction between science in general and research in particular sounds like an employment project for lawyers. The same for a distinction between science and doing a book review of a scientific book. There is no need to create artificial distinctions. A scientist would directly understand that you should not misrepresent and slander. However, LOWI makes issues more complex, to support a wrong overall conclusion.

LOWI 4.2.2. "Conclusion" (page 4) holds that a "*book review*" (of a scientific book) does not fall under the definition of "*scientific research*".

LOWI holds that the LOWI-rule "*consciously represent results and research reports by others wrongly or tendentiously*" (see box F above) applies "in principle":

- only to "research" (somehow narrowly defined)
- and not to science in general (that according to me also includes book reviews).

I am flabbergasted. The very name of LOWI refers to *Scientific Integrity* and not just "research" (narrowly defined). The title of its Memo "*Notitie Wetenschappelijke integriteit*" refers to *science* ("wetenschap") and not just "research" (narrowly defined) ("onderzoek").

PM. That section also speaks about a "merely negative review" ("louter een negatieve recensie") and thus side-steps the point that I object to misrepresentation and slander.

Can writing a review of a scientific book not be an element in research ? As said, Spandaw was confronted with new insights and for him, trying to understand it, it was actually research in his own field of mathematics education and the training of teachers of mathematics.

Actually, I explained this in my original protest, see this table. I haven't see an argument against it. I saw only statements that this would not be so, but without argumentation.

²² <https://www.knaw.nl/nl/thematisch/ethiek/landelijk-orgaan-wetenschappelijke-integriteit-lowi/adviezen-lowi-vanaf-2007>

<i>Dutch</i>	<i>My translation into English</i>
(I) Colignatus aan TU Delft, 2012-07-07 Het boek valt onder de vakliteratuur van lerarenopleiders wiskunde. Spandaw's onderzoek richt zich i.h.a. op andere zaken zoals m.n. modelleren maar hij zal de nieuwe aanpak in COTP toch hebben moeten onderzoeken wil hij erover hebben kunnen schrijven. Spandaw meldt inderdaad dagen met het boek bezig te zijn geweest, en vele aantekeningen te hebben gemaakt. De "bespreking" is zijn verslag van zijn onderzoek aan het boek en de nieuwe aanpak daarin. Mijn indruk is dat de klacht voor u ontvankelijk zou zijn.	(I) Colignatus to TU Delft, 2012-07-07 The book belongs to the professional literature for trainers of teachers of mathematics. Spandaw's research is generally directed at other topics like modelling in particular but he will have had to research the new approach in COTP will he have been able to write about it. Spandaw indeed mentions to have been occupied with the book for days, and to have made many annotations. The "review" is his report of his research on the book and the new approach therein. My impression is that the complaint would be applicable to you.

I also mentioned this in my appeal to LOWI, see above letters, but they apparently did not get it. Let me extend on this now. NB. I do not regard it as an omission on my part, that I should have extended on this before. It is so obvious, especially when it has been pointed out to you. In my perception it should have been obvious to LOWI as well, and I only extend on it now because I am flabbergasted that they accept misrepresentation and slander in science (and research).

To some extent we may regard this as an empirical issue. Perhaps scientists can indicate how they categorize their book reviews. This will depend upon the kind of book. It can be part of research or it can be science communication or it need not be science at all. Do the scores.

How did Spandaw justify his efforts to his dean ? In his "review" he complains that he lost days of his life in writing the "review" but he lists the published "review" amongst his professional publications. Surely, it is service to general society to debunk nonsense (like flat Earths) and this would be scientific in a general sense but not new research.

If LOWI does not test this, then they turn this into a unsolved dilemma:

If Spandaw had had such an open mind that he had found the new results in COTP all by himself, then his review would have been a form of science communication, and there would have been no element of research for him in this. Given his reaction, however, there is an element of research, since his closed mind is confronted with new findings that he must try to understand. (We assume that new research may also lead to the conclusion that you don't get it yet.)

If Spandaw has such a closed mind that he doesn't see what COTP does, then this does not necessarily imply that COTP is a wrong or even bad book. There are limits to what an author can do. COTP is quite accessible but traditionally thinking mathematicians may fail.

Perhaps we might understand in some way that Spandaw sees it as a "service to society" to misrepresent the book and to resort to abusive language, to stop others from considering the book. But this is too quick, and runs into scientific integrity.

Thus, given Spandaw's closed mind, and given that new findings by others also imply that *studying their work is research*, we find the unsolved dilemma:

there is either new research for Spandaw in reading COTP or Spandaw is right that COTP is nonsense.

That Spandaw reacts on the second track shouldn't be a cause however for the TU Delft Commission on Scientific Integrity to respect his position that this isn't science and that there was no research for him involved, because that Commission should be open to my complaint against the misrepresentation slander. Mutatis mutandis for LOWI.

Science should not create unsolved dilemmas. TU Delft and LOWI procedures shouldn't either.

Above unsolved dilemma reminds of the earlier one that we saw at TU Delft on the "obvious uselessness" of further investigation. Perhaps a closer investigation should have allowed TU Delft to see what their misunderstanding was. Do not expect me to resolve the misunderstandings at TU Delft: it is their job to listen carefully to me and repair their errors.

PM. I actually wonder whether Jeroen Spandaw would agree with me: that TU Delft gave the wrong arguments to reject my complaint, and that the proper approach would have been to have a committee by fellow scientists and a blackboard to look at what is misrepresentation and slander. If Spandaw would refer to this verdict to argue that he has been vindicated, then this would show again his lack of understanding of science.

(2) Is there evidence of deliberate uncarefulness and/or fraud ?

LOWI 5.2 holds that no evidence has been given for a context of a suspicion of "deliberate uncarefulness and/or fraud". However, I have provided that evidence.

<i>Dutch</i>	<i>My translation into English</i>
(J) LOWI uitspraak 2014-04-24, no 5.2 pag 7 Dit geldt met name indien geen sprake is van nadere gegevens, aangevoerde bewijsmiddelen en/of een context van vermoedens van bewust frauderen en/of opzettelijk onzorgvuldig of frauduleus handelen in de zin van de Gedragscode.	(J) LOWI verdict 2014-04-24, no 5.2 page 7 This holds in particular if there are no real data or information, contended pieces of evidence and/or a context of suspicion of conscious fraud and/or deliberate uncareful or fraudulent conduct in the terms of the Code of Conduct.

LOWI has been sleeping:

The "review" is evidence of itself, and I have given it including my comments per paragraph.²³

I already mentioned this to TU Delft:

<i>Dutch</i>	<i>My translation into English</i>
(K) Colignatus aanTU Delft, 2012-07-07 Ik ga niet uit van aanvankelijke opzet. Wel lijkt dr. Spandaw mij klaarblijkelijk een traditioneel denkend wiskundige die niet openstond voor een nieuwe aanpak, en die dan niet de verleiding heeft kunnen weerstaan om daarna niet meer serieus te lezen maar zaken in het belachelijke te trekken. Uiteindelijk lijkt hij daar toch bewust voor gekozen te hebben.	(K) Colignatus toTU Delft, 2012-07-07 I do not assume an initial deliberation. But my impression is that dr. Spandaw apparently is a traditionally thinking mathematician who was not open to the new approach, and who then could not withstand the temptation to no longer read seriously and turn issues into ridicule. In the end he will have chosen for this deliberately.

²³ <http://thomascool.eu/Papers/COTP/2012-02-13-Colignatus-reactie-op-Euclides-87-4-p168-170.html>

In addition, my first letter of appeal to LOWI of November 29 stated:

"There are ample indications that this hostile attitude is not uncommon in the world of mathematics. A mathematician wrote to me on March 7 2012:

"Once you have irritated old-style mathematicians (...) they turn, of course, into crackpot interception mode. Start nit-picking, misunderstanding, finding real small errors, maybe some big ones, but certainly consistently misunderstanding what you are trying to say. We all get letters and papers from crackpots who are squaring the circle, proving that Bell's theorem is wrong, or solving the P=NP problem. (...) It's quite a sport to show in public to your mathematical friends that these crackpots are a public nuisance. (...) You drew attention to yourself, you got attention, and now several Delft mathematicians are thoroughly enjoying a little group-crackpot-ridiculization. But I could say (and in fact do) that one could say that you asked for this! Never mind. Remember Gandhi: first they ignore you, then they fight you, then you win."

I object that I "asked for it". My book *Conquest of the Plane* also deals with the empirical science of didactics of mathematics, which differs from abstract mathematics itself. My impression is that the "reviewer" forgot about empirics and as a mathematician got into that "crackpot interception mode". The slander needs to be corrected."
(TC to LOWI, November 29 2013)

It is a mystery to me that LOWI holds that there is no evidence while it has been given.

(3) Can a scientist slander with integrity ?

The abuse of language by Spandaw falls for LOWI within the norms of science and doesn't ring any bells. For the purpose of this evaluation I read it again and it really is horrible.²⁴

Please note that I speak about *misrepresentation and slander*. It might seem that LOWI thinks that the two are different, with two different judicial regimes:

"LOWI": *Misrepresentation is not slander, and slander is not misrepresentation.*

This again creates employment for lawyers who tend to be confused. In my protest to TU Delft and LOWI it should be obvious:

- (a) The crux of the matter is the misrepresentation: LOWI verdict 5.2: "deliberate uncarefulness and/or fraud"
- (b) In addition, there is the abusive language
- (c) The package effect: not only (b) is slanderous but also (a) becomes slanderous.

It is useless to submit this to the penal code judge on slander. A penal code judge will declare himself or herself incompetent since it is a scientific issue. Such a judge will hold that Spandaw as a competent scientist will know what he writes, and that (b) follows from (a). This case thus belongs to LOWI. LOWI should look at it integrally while taking account of the package effect.

The LOWI verdict 5.2 & 5.3 page 7 distinguishes:

- 5.2: "deliberate uncarefulness and/or fraud" in the sense of the LOWI Memo ("Notitie")
- 5.3: "slander", that falls outside LOWI's competence but under the penal code.

²⁴ <http://thomascool.eu/Papers/COTP/2012-02-13-Colignatus-reactie-op-Euclides-87-4-p168-170.html>

LOWI thus holds that a scientist can *slander with integrity*. Possibly only if not convicted under the penal code ? To understand this, it may help to make a small table.

LOWI's verdict ?	<i>Scientific integrity</i>	<i>non-Scientific-integrity</i>
<i>LOWI Memo ("Notitie")</i>	Spandaw's review	"deliberate uncarefulness and/or fraud"
<i>Penal code</i>	non-convicted slander	convicted slander

Also LOWI mentions the possibility that I might appeal to the penal code, but this suggestion has only a formal basis, see above. A penal code judge could even refer to LOWI's verdict:

In 5.3 LOWI state: "The negative review gives, as expounded earlier, no breach of scientific integrity."

A likely penal code judge: What isn't a breach of scientific integrity, cannot be slander.

I find LOWI's position quite convoluted. Let me present the proper situation. Note that if Spandaw's review has finally been exposed as misrepresenting and slanderous, then it becomes an option to also submit this to the penal code. Note that it will not be easy to expose Spandaw's review as misrepresenting and slanderous, now that LOWI has decided on the issue. However, a boycott of Holland will help the Dutch people to see that they should respect science and reorganize some of their institutions.²⁵

True situation	<i>Scientific integrity</i>	<i>non-Scientific-integrity</i>
<i>LOWI Memo ("Notitie")</i>	EWS & COTP	Spandaw's review: "deliberate uncarefulness and/or fraud" and also slanderous
<i>Penal code</i>	(failed states)	slander (convicted or not)

PM 1. I never said that the review was merely negative. I protested that the misrepresentation and slander were a breach of integrity.

PM 2. In the same paragraph LOWI upholds the TU Delft position: "an allegedly slanderous review does not fall under the terms for a breach of integrity of science", while TU Delft focussed on "own research", and didn't elaborate on slander under the penal code.

Thus, LOWI misrepresents my argument, and doesn't understand how processes of misrepresentation and slander can be a breach of scientific integrity. They don't care about the researchers who have experienced misrepresentation and slander, and don't invite them to talk things over.

Perhaps if TU Delft had used the convoluted argument that LOWI now uses, I might have drawn above table for LOWI in my appeal instead of now after the verdict. Perhaps LOWI then might have seen how convoluted this argument is that they now create themselves. However, we should hold that LOWI should be able to be sensible by itself.

Generally, when you judge about my work or text, and you disagree then it helps to ask questions first, but LOWI didn't submit their verdict in draft for comments.²⁶

²⁵ <http://boycottholland.wordpress.com/2014/04/26/when-anne-frank-returns-to-haunt-you/>

²⁶ <http://boycottholland.wordpress.com/2014/06/04/if-holland-were-just-a-bit-nicer-and-more-competent/>

(4) A list of errors

Erroneously, LOWI does not correct TU Delft and rejects my appeal on:

- not hearing me (with the same argument: "apparently useless")
- not setting up an investigation with external experts
- not accepting that a slanderous review of a scientific book falls under science and in this case also under research by dr. Jeroen Spandaw
- suggesting that what happens here is a normal event in science
- requiring me to supply more evidence (to start such investigation)
- disregarding the information that came in after 2012-07-07 and even 2012-12-04
- not accepting that a slanderous book review falls under the LOWI Memo page 7 rule: "consciously represent results and research reports by others wrongly or tendentiously".

(5) Deficient procedure

The procedure from TU Delft Commission to TU Delft Board to LOWI does not fit the normal procedure from court, to (district) court of appeal, to supreme court. Some effects have been:

- LOWI was not quite able to use the other results that came in between the TU Delft decision of 2012-12-04 and my appeal at LOWI 2013-11-29, notably the comments by Boudri
- LOWI holds that TU Delft could not use that additional information too, while TU Delft was corresponding with LOWI in that same period
- The TU Delft Board did not give that new information to its Commission
- It is not clear why LOWI agreed with that
- It would have been better if the TU Delft Board had asked for a second reading
- Please note that I hold that the Commission should already have seen the argument without the comment by Boudri. But I am very grateful for the time that Boudri put into this, and his remarks might have had a beneficial effect on the Commission in a second reading
- PM. However, perhaps Boudri's remarks had a beneficial effect on LOWI too, but apparently there is no formal effect.

It has a great advantage to keep the discussion about scientific integrity within the realm of scientists: for you can call on the resources of scientists to settle issues. However, TU Delft and LOWI did not call on the resources of scientists, and turned this procedure into a mixture with some scientific titles and litigation. Above, it appeared that the result is a mockery of integrity, rationality and justice.

Conclusions

Though we haven't looked at it here, the "review" by Jeroen Spandaw (TU Delft) of "*Conquest of the Plane*" is misrepresentative and slanderous. See the documents of protest and appeal referred to here.

The Dutch journal for mathematics teachers Euclides and associations NVVW and PWN are sick organisations who appear not to care about critique on the quality of mathematics education, and not to care about a misrepresentative and slanderous "review". While there are three opposing reviews or comments, and while, of course, I wrote those books and present decent work.

TU Delft and LOWI fail in their procedure on the integrity of science w.r.t. this misrepresentative and slanderous "review". LOWI does not provide the required protection for scientists.

The situation has cost me an inordinate amount of time: (a) to reply to the misrepresentation and the slander of the "review", (b) to approach the editors of Euclides and the boards of NVVW and PWN to try to resolve the issue, (c) to submit to TU Delft and LOWI, (d) to report on this final verdict, and create the website with the relevant selection of anonymised documents.

All this loss of time would not have been necessary if Spandaw just had had the scientific decency and modesty to contact me and ask some questions about points that he did not get. Why do I keep meeting such arrogant people who cannot deal with new ideas ? Why do the editors of Euclides send COTP for review to this kind of closed minded mathematicians ? Why don't they see that his "review" is false ? Why do other people attach such great value to deluded authors like Spandaw whose logical errors and abusive language should indicate that he has a serious problem in dealing with science ?

I strongly protest against Spandaw's unwillingness to discuss issues with me, possibly with other moderators present. Holland is a small country, and we still haven't met person to person. Spandaw's unwillingness to meet me suggests that he thinks that I am not open to criticism. This is an unwarranted inference on his part. It is also a non-logical inference, since my creative work shows that I am quite capable to see criticism.

Let me remark that I don't have a special interest in the views of Spandaw in particular. But there is his misrepresenting and slanderous "review". Meeting him should also allow me to get a better feel of what kind of scientist he is. It would make a difference when he is sincere and only closed minded, or whether he now has become small-minded, incapable of admitting of having been wrong. It makes some difference to know what to expect. But Spandaw's view remains false, and it would be more important to get proper responses from the rest of the world.

EWS was published in 2009, COTP in 2011, and we now are in June 2014. The economic crisis since 2007 has been taking its toll. Events could have been different if mathematics educators had read EWS with an open mind and taken action. I weep for the people suffering in e.g. Greece, Spain, Syria and the Ukraine, since my analysis on unemployment would have meant a world of difference. But educators in mathematics don't care, they see only their small world where things should stay as they have been traditionally; and standards of integrity lose out.

But of course, this applies *mutatis mutandis* for the period since the year 0. The lesson since then is: Protection of science lies only in reading with an open mind and in decency.

Please try the latter, and see how far you can get on EWS and COTP. If you happen to know some people with some training in mathematics, please alert them to EWS and COTP and this present text. Overall, boycott Holland, see my wordpress weblog.

Appendix: COTP and the AMS

Elegance with Substance (EWS, 2009) and *Conquest of the Plane* (COTP, 2011) form a combination, in which EWS gives critique, perhaps seen as negative, and in which COTP applies the critique, perhaps seen as positive, in creating a new course of mathematics from the ground up. COTP essentially presents new ideas but uses the format of a primer.

EWS is listed in the AMS Book List, *Notices* Vol 58, No 11, p1474.²⁷
For COTP however, the *Notices* have the rule that they do not include textbooks.

The books *A Logic of Exceptions* (ALOE, 1981, 2007, 2011) and *Voting Theory for Democracy* (VTFD, 2001, 2011) follow that same strategy of a textbook format. When I submitted the new editions of COTP, ALOE, VTFD and EWS to the *Notices*, in that order, the editor replied:

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Subject: Re: For the Book List
Date: Mon, 25 Jul 2011

Dear Mr. Colignatus,

I'm sorry you had to wait so long for a reply. From what I can tell, the first two titles you list below are too close to being textbooks to be appropriate for inclusion in the Book List. We will put in the other two titles, and these will appear in the Book List in the November *Notices*. With best regards,

Allyn Jackson
Notices Deputy Editor

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Date: Mon, 25 Jul 2011 21:16:34 +0200
Subject: Re: For the Book List

Dear Allyn,

Thank you for your kind and encouraging message.

There are 4 books: COTP, ALOE, VTFD and EWS: 3 have a textbook format and only EWS doesn't.

The reason for the textbook format (though without exercises and test questions) is that the ideas are so unconventional that the subject is built up from the bottom up. Readers would not get it if I would choose another format. COTP re-engineers analysis and calculus. ALOE re-engineers logic. VTFD re-engineers voting theory. For me the emphasis is on the re-engineering and not on the textbook format, though I emphasize that the 3 books are targetted at a first year course in college or university (since the re-engineering concerns fundamental issues that are best resolved in that year and not after graduation).

I hope this is helpful. Perhaps also see a review of ALOE for the Dutch math magazine:

<http://www.math.leidenuniv.nl/~naw/serie5/deel09/sep2008/reviewssep08.pdf>

²⁷ <http://www.ams.org/notices/201110/rtx111001471p.pdf>

Yours sincerely,

Thomas Cool / Thomas Colignatus

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Subject: Re: For the Book List
Date: Fri, 5 Aug 2011 15:36:05 +0200

Dear Thomas,
Thanks for your reply. Based on what you say in the message below, it looks like only EWS is suitable for the Book List. It will appear there starting with the November issue. Best regards,
Allyn Jackson