

[Lawyer representing the Defendant]

Ruling by the Danish Committee on Scientific Dishonesty for Natural, Technological and Production Sciences on the complaint of 24 July 2012 against [Defendant]

1 Introduction

On 24 July 2012, the Dean of the Faculty of Engineering and Science at [University], [Complainant], submitted a written complaint to the Danish Committees on Scientific Dishonesty (DCSD), alleging that [Defendant] had acted in a scientifically dishonest manner by committing plagiarism during the drafting and reporting of research findings for a PhD thesis.

The case has been considered by the Danish Committee on Scientific Dishonesty for Natural, Technological and Production Sciences (UNTPF). A draft ruling of 28 June 2014 was sent to the parties for consultation pursuant to 13(3) of Executive Order no. 306 of 20 April 2009 on the Danish Committees on Scientific Dishonesty, as amended by Order no. 144 of 20 February 2012. The parties' comments on the draft ruling have been included in this final version to the extent that they contain significant new information.

During the case, the Defendant has been represented by Flemming Schroll Madsen, lawyer.

2. Ruling

The Committee finds that the Defendant has acted in a scientifically dishonest manner in the form of plagiarism pursuant to Section 2, no. 5 of Executive Order no. 306 of 20 April 2009 on the Danish Committees on Scientific Dishonesty, as amended by Order no. 144 of 20 February 2012.

The plagiarism occurred during the drafting and reporting of research findings in the scientific product:

•]PhD thesis].

In its assessment, the Committee has examined versions B and D of the Defendant's PhD thesis.

2 December 2014

Danish Committees on Scientific Dishonesty

Secretariat of the DCSD

Bredgade 40 DK-1260 Copenhagen K Denmark

Tel.: (+45) 3544 6200 Fax: (+45) 3544 6201 Email: fi@fi.dk Web www.ufm.dk

CVR no. 1991 8440

Ref. no. 13/017306-57



The Committee has informed the Defendant's current employer, [University], by sending a copy of this ruling, pursuant to 15(1), no. 1 of the DCSD order.

The Committee notes that the Defendant's PhD thesis also exists in a version (C), which has not been examined by the Committee. An analysis of version C can be found at the internationally known website Vroniplag¹, where it is concluded that significant parts of version C of the Defendant's thesis have been plagiarised, with a large overlap with the passages found in versions B and D.

A copy of the ruling is also being sent to the Complainant for information.

The ruling was made unanimously by Henrik Callesen, Ole Kirk, Mikael Rørdam, Berthe Willumsen, Peter Sestoft, Bent Ørsted og Henrik Gunst Andersen (chair). Susanne Bødker participated in the proceedings until her term of office expired on 30 June 2013. Peter Sigmund participated in the proceedings until his term of office expired on 31 January 2014. Peter Sestoft participated in the proceedings from 1 February 2014. Bent Ørsted participated as an alternate from 18 December 2013.

Danish Committees on Scientific Dishonesty

3. Summary

In July 2012, a Danish university reported a researcher to the Danish Committees on Scientific Dishonesty (DCSD), alleging that the researcher had acted in a scientifically dishonest manner by committing plagiarism during the drafting and reporting of research findings published in the researcher's PhD thesis.

Overall, the university asserted that the PhD thesis contained four types of plagiarism:

- 1. Almost direct copying of other texts without source references
- 2. Paraphrasing of other texts without source references
- 3. Paraphrasing of other texts with source references
- 4. Wikipedia is given as a source

The researcher submitted the PhD thesis (version B) to the Danish university in April 2007. After a public defence in June 2007, the researcher was awarded a PhD degree in August 2007. Subsequently, due to a number of procedural errors at the Danish university, the university permitted the submission of a revised thesis (version D), which the university received in May 2012. The university's complaints to the DCSD "mainly" concerned version D of the thesis.

The researcher claimed the case should be dismissed because the case was not within the DCSD's remit (lack of jurisdiction). The researcher further claimed that no plagiarism was involved, stating among other things that plagiarism has not been defined unambiguously and that the kind of reuse of text found in the PhD thesis can also be found in a number of other scientific products.

The case has been considered by the Danish Committee on Scientific Dishonesty for Research in the Natural, Technological and Production Sciences.

¹ http://de.vroniplag.wikia.com/wiki/Home



The Committee ruled that the case was not beyond its remit and that it was entitled to pursue the case, including versions B and D of the PhD thesis, because both versions constituted a voluntarily submitted scientific product and had the requisite connection to Denmark, pursuant to the Executive Order on the DCSD.

The Committee considered in detail 10 passages from versions B and D of the PhD thesis, and found large-scale direct copying and/or paraphrasing without sufficient indication and referencing of sources.

On this basis, the Committee ruled that plagiarism had occurred in both versions B and D of the PhD thesis, that this was a serious breach of good scientific practice and that the researcher had acted intentionally.

However, the Committee did not consider that the researcher's use of Wikipedia as a source constituted a serious breach of good scientific practice as defined by the Executive Order on the DCSD.

Danish Committees on Scientific Dishonesty

The Committee did not address a number of other objections raised by the researcher concerning the university's procedures, because these did not relate to scientific dishonesty.

The Committee informed the Defendant's current employer, enclosing a copy of the ruling.

4. Process, background and subject matter of the case

4.1 Process

On 24 July 2012, the Complainant submitted a written complaint to the DCSD Secretariat concerning the Defendant, alleging that the Defendant had acted in a scientifically dishonest manner by committing plagiarism during the drafting and reporting of research findings for the [PhD thesis].

On 9 August 2012, the DCSD Secretariat acknowledged receipt of the complaint by email.

On 17 August 2012, the DCSD Secretariat sent the case papers by post to the Defendant for consultation, with a deadline for response of 7 September 2012.

On 30 August 2012, at the request of the Defendant, the DCSD Secretariat sent a letter to the Defendant extending the deadline for submission of the response to 21 September 2012.

On 21 September 2012, in a letter to the DCSD Secretariat with appendices, the Defendant contended that the Committee should rule that the case was ultra vires.

In a letter of 4 December 2012, the DCSD Secretariat informed the Defendant that the case had been referred to the Committee, but that it had not yet ruled definitively on the objections regarding its own remit. In the same letter, the DCSD Secretariat again encouraged the Defendant to respond to the consultation, particular-



ly regarding the substantive issue of plagiarism in the PhD thesis, by a deadline of 7 January 2013.

On 21 December 2012, in a letter to the DCSD Secretariat, the Defendant requested an extension of this deadline.

On 7 January 2013, the DCSD Secretariat agreed by letter to extend the deadline for responses until 4 March 2013.

On 4 February 2013, the Defendant requested by letter that the DCSD Secretariat further extend the consultation deadline until the end of May 2013, and that the DCSD respond to the question of whether or not it was acting ultra vires.

On 13 February 2013, the DCSD chairperson informed the Defendant by letter that the Committee had not finally considered the issue of its own remit but that, on the existing basis, the chairperson did not agree that the Committee was acting ultra vires. Regarding the request for a new extension of the deadline for responses, the DCSD chairperson requested further documentation in support of the request.

On 28 February 2013, the Defendant informed the DCSD Secretariat by letter that additional documentation in favour of a further extension would be presented to the Committee.

In letters of 6 March and 14 March 2013, the Defendant presented documentation in support of the request for a new deadline extension. On 19 March 2013, the DCSD chairperson granted an extension to 5 August 2013.

On 5 April 2013, the DCSD Secretariat informed the Complainant in an email of the retraction of a number of the Defendant's other works and asked whether, in this light, the Complainant wished to continue to pursue the case. On 11 April 2013, the Complainant responded by email that he did wish to continue to pursue the complaint.

On 30 July 2013, the DCSD Secretariat received a response with appendices from the Defendant.

On 8 August 2013, the DCSD Secretariat emailed the Defendant's response to the consultation along with the appendices to the Complainant with a deadline for comments of 30 August 2013.

At the request of the Complainant, the DCSD Secretariat granted an extension of this deadline to 1 October 2013.

On 26 September 2013, the Complainant emailed a response to the Defendant's consultation response of 30 July 2013 to the DCSD Secretariat.

On 26 September 2013, the DCSD Secretariat emailed the Complainant's consultation response of 26 September 2013 to the Defendant, with a deadline for comments of 18 October 2013. On 27 September 2013, the Complainant sent supporting documents for the consultation response of 26 September 2013, which the DCSD Secretariat forwarded to the Complainant by email on 27 September 2013.



At the request of the Defendant, the Complainant drew up an English-language version of the consultation response of 26 September 2013. On the same date, the DCSD Secretariat forwarded this version to the Defendant.

On 4 October 2013, the Defendant wrote a letter to the DCSD Secretariat, requesting an extension to week 51 (16–22 December 2013) of the deadline for submitting responses to the Complainant's consultation response of 26 September 2013. The same letter also contained a request that the Complainant translate an appendix of 4 June 2012 into English.

On 15 October 2013, the DCSD chairperson granted an extension of the deadline to 1 November 2013. On 16 October 2013, the Defendant was informed by email that the Complainant did not wish to translate the appendix of 4 June 2012 into English.

On 31 October 2013, the Defendant submitted a response to the Complainant's response to the consultation in an email to the DCSD Secretariat.

On 20 November 2013, the DCSD informed the Complainant in an email of the Defendant's consultation response of 31 October 2013.

On 28 May 2014, the DCSD Secretariat emailed a draft ruling to the parties for consultation, with a deadline for comments of 25 June 2014. At the same time the DCSD Secretariat sent the draft ruling for translation.

In an email of 3 June 2014 the Defendant requested an extension of the deadline for the submission of the consultation response from the time when the English translation of the draft ruling would be available.

In an email of 10 June 2014, the DCSD Secretariat sent an English translation of the draft ruling to the parties.

In an email of 16 June 2014 the Defendant requested a final extension of the deadline for a response to the consultation to 12 August 2014, citing the need to prepare for exams and the forthcoming holiday period. At the same time the Defendant requested an English translation of DCSD's rules and regulations.

In an email of 24 June 2014, the DCSD Secretariat granted an extension of the deadline to 12 August 2014 and at the same time informed the Complainant that the deadline had also been extended to the same date for the Complainant. With regard to the request for an English translation of the DCSD's rules and regulations, the DCSD Secretariat referred to the previously sent English draft ruling and the DCSD's website.

In an email of 7 August 2014, the Complainant sent comments on the draft ruling of 28 May 2014.²

 2 The Complainant's comments of 7 August 2014 are forwarded to the Defendant as an enclosure to the ruling.



In an email of 11 August 2014, the Defendant once again requested an extension of the deadline for submission of the consultation response.

In an email of 12 August 2014 the chairperson of the DCSD granted an extension of the deadline to 15 September 2014.

In an email of 12 September 2014 the Defendant sent comments on the draft ruling of 28 May 2014. The Defendant also attached a number of appendices containing, among other things, a statement from [University], email correspondence relating to the Defendant's PhD programme, as well as a number of scientific articles.

In an email of 18 September 2014 to the DCSD Secretariat, the Defendant further commented on his consultation response of 12 September 2014.

In an email of 3 October 2014 the DCSD Secretariat forwarded the Defendant's consultation response to the Complainant for information.

Danish Committees on Scientific Dishonesty

4.2 Background and subject matter

As background for the complaint, the Complainant informed that the Defendant submitted the [PhD thesis] in April 2007. After a public defence in June 2007, the Defendant was awarded a PhD degree in August 2007. This version of the PhD thesis will hereafter be referred to as version B.

According to the Complainant, [University] received a report alleging plagiarism in the thesis in April 2010, which subsequently led to a study that indicated that up to 70% of the first 100 pages of the thesis had been plagiarised from existing sources. According to the Complainant, during the subsequent processing of the case, it became clear that [University] had made a number of regrettable procedural errors during the process of awarding the degree. According to the Complainant, [University] therefore for legal reasons permitted the submission of a revised PhD thesis, which the University received on 7 May 2012. This version of the PhD thesis will hereafter be referred to as version D.

The Complainant also notes that a further plagiarism review was initiated after the Complainant received version D. According to the Complainant, this indicated at least 10 instances of directly copied text without reference to a source and/or paraphrasing to an extent that is incompatible with the requirements for a PhD thesis.

As a result of this, the Complainant decided to report the Defendant to the DCSD "mainly" on the basis of version D.

The Committee notes that the Defendant submitted the thesis without having completed a PhD programme. The Defendant's PhD thesis was submitted with a legal basis in section 15(2) of the then-current Executive Order on PhDs (Executive order no. 114 of 8 March 2002), which allows for this if qualifications corresponding to those obtained after completing a PhD programme have been obtained in another manner.

5. The parties' claims and contentions



5.1 The Complainant's claims and contentions

The Complainant alleges that the Defendant acted in a scientifically dishonest manner by committing plagiarism when drafting and reporting research findings in the [PhD thesis].

As stated, the Complainant "mainly" wished to complain about version D of the thesis. To substantiate the complaint, the Complainant attached an annotated copy of the thesis (version D), highlighting a number of passages that, according to the Complainant, constitute plagiarism. The Complainant also attached a list of sources and copies of original source texts, highlighting the sections that the Complainant believes the Defendant plagiarised in the PhD thesis.

In general, the Complainant contends that the thesis contains the following four types of plagiarism:

- 1. Almost direct copying of other texts without source references
- 2. Paraphrasing of other texts without source references
- 3. Paraphrasing of other texts with source references
- 4. Wikipedia is given as a source

The Complainant also notes that while it may be legitimate to describe background knowledge without citing sources, sources must be cited when background knowledge takes the form of verbatim – or almost verbatim – reproduction of other authors' texts.

In a consultation response of 7 August 2014, the Complainant noted that the Defendant has not completed a PhD programme at [University]. The Defendant's PhD thesis was accepted for assessment pursuant to section 15(2) of the then-current Executive Order on PhDs (Executive Order no. 114 of 8 March 2002), as the University found that the Defendant had in other ways acquired qualifications that corresponded to those acquired in the PhD programme.

5.2 The Defendant's responses and contentions

The Defendant contends that he should be declared innocent of the complaint alleging scientific dishonesty.

In support of this contention, the Defendant cites the following reasons in particular:

- that the Committee lacks jurisdiction to hear the case,
- that the Defendant has not committed any of the four forms of plagiarism described by the Complainant. The Defendant states, among other things, that plagiarism has not been defined unambiguously and that the kind of reuse of text found in the PhD thesis can also be found in many other forms of scientific writing,
- that, even if the Committee finds that plagiarism has taken place, the Defendant has not acted intentionally or with gross negligence, and that therefore this is not a case of scientific misconduct.

The following sections (5.2.1 - 5.2.3) expand upon the Defendant's responses and contentions.



The Defendant also lists a series of aspects regarding the way in which the Complainant dealt with the case prior to submitting it to the DCSD, which, in the opinion of the Defendant, were flawed.

5.2.1 Remit

Regarding the Defendant's contention that the Committee lacks jurisdiction to hear the case, the Defendant has, among other things, contended that:

- the revised PhD thesis (version D) is not a published scientific product,
- the case refers to the quality of research that has not yet been published
- the Defendant cannot be considered to have voluntarily submitted the PhD
 thesis until the thesis has been put to an assessment committee. The Defendant's view is that, since this has not happened, the thesis has not been
 submitted voluntarily.

Danish Committees on Scientific Dishonesty

5.2.2 The Complainant's reuse of text is not unacceptable

The Defendant contends that the concept of plagiarism has not been defined unambiguously. According to the Defendant, plagiarism has not been defined, nor are there rules that, for example, set acceptable limits for paraphrasing in a PhD thesis.

With reference to the literature, the Defendant further states that it is recognised that there are three scenarios in which a researcher does not have to cite a reference: general knowledge and background knowledge, i.e. incontestable facts available from a wide range of reliable sources; and observations, i.e. when an author personally experienced what is described.

Re. the Complainant's point of contention no. 1 – Almost direct copy without reference to the source

According to the Defendant, it is recognised in the scientific community that basic definitions can be reused without reference to the original work.

According to the Defendant, it is also recognised that in scientific work, especially in the natural sciences, it is sometimes difficult – or even impossible – to describe processes, models, methods and products with sufficient accuracy without using identical and previously used words.

According to the Defendant, the PhD degree was awarded to him on the basis of his scientific findings and development of new measures, theories and mathematical models and algorithms to support the analysis, visualisation and destabilisation of terrorist networks.

In this light, the Defendant believes that the first point of criticism of the PhD thesis should be rejected.

Re. the Complainant's point of contention no. 2 – Paraphrasing without reference to the source



The Defendant denies having paraphrased passages without citing sources in a manner that constitutes plagiarism. According to the Defendant, the only passages that appear in the thesis without reference to sources describe general or background knowledge of which society in general is aware, and that he was therefore justified in using the texts without citing the source.

According to the Defendant, one of the Complainant's main contentions concerning paraphrasing without reference to the source is that the paraphrasing is of text taken from the Defendant's own works, written together with inter alia the person which the Defendant refer to as his PhD supervisor. The Defendant states that it is common academic practice for academics to reuse text from their own works when describing the methods discussed in those works. The Defendant concedes, however, that there is general consensus that source references should be made to the works that are quoted from.

In this light, the Defendant contends that this point of contention should also be rejected.

Re. the Complainant's point of contention no. 3 – Paraphrasing with reference to the source

According to the Defendant, it is well-known and accepted practice in the scientific community that background sections and literature-review sections may include paraphrased text with source references. According to the Defendant, this practice is followed in many other types of scientific work by PhD students and senior researchers at [University].

Against this background the Defendant does not consider paraphrasing with source references as plagiarism. Further to this point, the Defendant notes that the Complainant has not presented a clear definition of the concept of plagiarism, and that the Defendant has documented that paraphrasing with source references is an accepted practice at [University].

In this light, the Defendant contends that this point of contention should also be rejected.

Re. the Complainant's point of contention no. 4 – Wikipedia is indicated as a source

According to the Defendant, the Complainant has failed to demonstrate that there is a ban on using Wikipedia as a source in PhD theses. The Defendant states that text from Wikipedia is general knowledge and that therefore there is no requirement to cite sources. According to the Defendant, he did nevertheless cite the sources.

The Defendant also states that it is acceptable practice in the scientific community to refer to Wikipedia, and cites examples of a number of other scientific PhD theses written at [University] that also contain references to Wikipedia.

In this light, the Defendant contends that this point of contention should also be rejected.



5.2.3 Any plagiarism has not been done intentionally or with gross negligence.

The Defendant further states that he has not intentionally or with gross negligence plagiarised or attempted to otherwise mislead examiners about his own research effort while planning or writing the thesis.

In support of this, the Defendant states, among other things, that he followed the general practice at [University] in good faith. The Defendant further states (quote): "I remained unaware from the existence of good scientific practices of Danish Construct. Therefore, it is an excusable negligence (honest error) on my party i.e., unintentional plagiarism (misconduct) a simple negligent act committed without the specific intent to deceive, or mislear, but with a desire to communicate my findings in a way with which I was unfamiliar."

Further to this, in a consultation response of 12 September 2014, the Defendant states that he had not received instruction in correct paraphrasing, and that [University] misjudged him when it considered him sufficiently research-literate to be able to submit a PhD thesis without having been sufficiently academically trained by the Complainant.

The Defendant's final remarks

Finally, the Defendant argues as follows (quote):

"Following academic practice (not attributing common knowledge or background information) and accidentally omitting a set of quotation marks is not the same as submitting a downloaded paper."

Furthermore, the Defendant argues that the rules and regulations do not contain any clear definition of the concept of plagiarism; that the Defendant did not receive any feedback from his supervisor while writing the thesis; and that the University refused to allow the Defendant to take part in compulsory PhD courses (e.g. on writing and reviewing scientific articles). As a result of all of these factors, the Defendant considers the accusation of scientific dishonesty unreasonable.

6. Rules and regulations

This case has been processed under the Danish Act on the Research Advisory System etc., cf. Consolidated Act no. 365 of 10 April 2014 and Executive Order no. 306 of 20 April 2009 on the Danish Committees on Scientific Dishonesty, as amended by Order no. 144 of 20 February 2012 (the Executive Order on the DCSD). The Executive Order on the DCSD applies to all cases brought before the Committee after 1 December 2008.

Scientific dishonesty is defined in section 2, no. 3 of the Act on the Research Advisory System and in section 2 of the Executive Order on the DCSD:

"Section 2. Scientific dishonesty is defined as: falsification, fabrication, plagiarism and other serious violations of good scientific practice committed intentionally or



due to gross negligence during the planning, implementation or reporting of research results. Included hereunder are:

- 1) Undisclosed fabrication and construction of data or substitution with fictitious data.
- 2) Undisclosed selective or surreptitious discarding of a person s own undesired results.
- 3) Undisclosed unusual and misleading use of statistical methods.
- 4) Undisclosed biased or distorted interpretation of a person s own results and conclusions.
- 5) Plagiarisation of other persons results or publications.
- 6) A false credit given to the author or authors, misrepresentation of title or workplace.
- 7) Submission of incorrect information about scientific qualifications."

The DCSD's remit is described in sections 1(4), 3 and 6 of the Executive Order on the DCSD:

Danish Committees on Scientific Dishonesty

- "Section 1(4) The Committees may consider cases where the defendant has received scientific training within the area of research that the scientific product complained about concerns and who
- 1) has had the scientific product complained about published in Denmark;
- 2) has prepared the scientific product complained about during his or her employment or commercial activity in Denmark;
- 3) has obtained or applied for a grant from Danish public authorities for the preparation of the scientific product complained about; or
- 4) otherwise has his or her closest connection to Denmark."

"Section 3. The Committees shall not be entitled to consider cases involving the validity or truth of scientific theories or cases involving the research quality of a scientific product."

"Section 6. The Committees on Scientific Dishonesty may consider cases involving complaints about a written scientific product after the defendant s voluntary handing over thereof, cf. section 1(4).

(2) The Committees may also consider cases involving complaints about an application filed with a view to applying for a grant from public research funds."

The sanctions available to the DCSD are stipulated in section 15 of the Executive Order on the DCSD:

- "Section 15. In cases where scientific dishonesty is ascertained by the Committees on Scientific Dishonesty, the Committees shall make a statement expressing criticism. At the same time, the Committees may:
- 1) Inform the defendant s employer if the party in question is employed as a researcher.
- 2) Recommend that the scientific project concerned be withdrawn.
- 3) Inform the relevant public authority supervising the area.
- *4)* Notify the contributor if the Committee has found scientific dishonesty in an application for contribution from public research grants, cf. section 6 (2).
- 5) Make out a police report where a punishable offence is involved.



- 6) At the special request of an employing authority, state their views on the degree of scientific dishonesty.
- (2) In cases under (1) hereof, the Committees shall state their views on the degree of scientific dishonesty ascertained and on its importance to the scientific message in the scientific product concerned.
- (3) The Committees may shelve cases under (1) hereof if the Committees find the scientific dishonesty ascertained only to be of little importance to the scientific message in the product."

The DCSD's powers to pursue cases are stipulated in section 31(1) and (3) of the Act:

"Section 31. The object of the Danish Committees on Scientific Dishonesty is to process cases relating to scientific dishonesty raised by report and which signify 1) research performed in Denmark

- 2) research performed by persons with employment in Denmark, or
- 3) research performed with Danish public support.
- (2)...
- (3) The Committees may process cases by own initiative if the cases are of social interest or of significance to the health of human beings or animals, and where reasoned assumption of scientific dishonesty exist.
- (4) ...
- (5) ...
- (6) ..."

6.1 Development of the concept of dishonesty

The rules and regulations set out above applied at the time when version D of the PhD thesis was submitted.

When version B of the thesis was submitted in April 2007, the legal framework was defined in the Act on Research Consulting, etc., cf. Act no. 405 of 28 May 2003 and corresponding Executive Order no. 668 of 28 June 2005 on the DCSD. The definition of scientific dishonesty was given in Section 2 of Executive Order no. 668 of 28 June 2005:

"Section 2. Scientific dishonesty is defined as intentional or grossly negligent conduct in the form of falsification, plagiarism, concealment or similar, which involves improper misrepresentation of one's own scientific work and/or research results. This includes the following:

- 1) Undisclosed construction of data or substitution with fictitious data
- 2) Undisclosed selective or surreptitious discarding of own undesired results
- 3) Undisclosed unusual and misleading use of statistical methods
- 4) Undisclosed biased or distorted interpretation of own results and conclusions
- 5) Plagiarism of another person's results or publications
- 6) Improper statements concerning authorship, title or workplace
- 7) Submission of incorrect information about scientific qualifications"

In Executive Order no. 1122 of 24 November 2008 the above wording was changed to the following wording, which is preserved in the current Act and corresponding Executive Order:



"Section 2. Scientific dishonesty is defined as: falsification, fabrication, plagiarism and other serious violations of good scientific practice committed intentionally or due to gross negligence during the planning, implementation or reporting of research results. Included hereunder are:

- 1) Undisclosed fabrication and construction of data or substitution with fictitious data
- 2) Undisclosed selective or surreptitious discarding of a person's own undesired results
- 3) Undisclosed unusual and misleading use of statistical methods
- 4) Undisclosed biased or distorted interpretation of a person's own results and conclusions
- 5) Plagiarisation of other person's results or publications
- 6) A false credit given to the author or authors, misrepresentation of title or workplace
- 7) Submission of incorrect information about scientific qualifications."

Danish Committees on Scientific Dishonesty

It is the Committee's view that, although there has been a change in the wording of the definition of scientific misconduct, it is not a major substantive change. The substance of the definition remains the same, despite changes to the wording. This view is supported by the DCSD chairperson, who has stated that the 2008 change was simply made to clarify the definition. Furthermore, the list of examples in the definition remains unchanged.

The Committee notes that the requirement of "improper misrepresentation" in the 2005 definition was not repeated verbatim in 2008. The Committee adds that the word "improper" was chosen to indicate the requirement of a certain degree of gravity, a requirement that the 2008 definition covers by stating that only a "serious" breach of good scientific practice is tantamount to dishonesty. In assessing whether a serious breach of good scientific practice has been committed, it is implicit that the breach is likely to mislead the reader of the scientific product concerned. In practice, a criterion of misleading will therefore be part of the DCSD's assessment of whether a given action can be characterised as scientific dishonesty.

The Committee has assessed the individual charges based on the definitions of scientific dishonesty valid at the time that the scientific products emerged, and found no reason to arrive at a different ruling from the one that results from the application of the current definition. Therefore the following refers only to the current rules.

7. The Committee's ruling

The Committee's comments on the subject matter and remit are found in section 7.1.

Section 7.2 consists of the Committee's comments on the information in the case.

Section 7.3 consists of the Committee's comments on the concept of plagiarism.

Section 7.4 consists of the Committee's processing of the Defendant's contention that the same type of reuse of text occurs in other scientific works.



Section 7.5 consists of the Committee's analysis of 10 passages from the PhD thesis (in versions B and D) which relate to the Complainant's points of contention:

- almost direct copy without source references
- paraphrasing without source referencing.

Section 7.6 consists of the Committee's deliberations about the Complainant's other points of contention:

- Paraphrasing of other texts with source references
- Wikipedia cited as a source.

Section 7.7 consists of an assessment of whether the reuse of text in versions B and D of the thesis represents a serious breach of good scientific practice.

Section 7.8 consists of an evaluation of whether the Defendant acted with intent or in a grossly negligent fashion.

Danish Committees on Scientific Dishonesty

The final section, 7.9, consists of a summary of the Committee's ruling.

7.1 Subject matter and remit

The Complainant has "mainly" complained about version D of the PhD thesis, which is the revised version that the Defendant submitted for assessment on 7 May 2012.

The Committee notes that version D of the thesis is a revised version of version B, on the basis of which the Defendant originally earned his PhD degree. In this light, the Committee finds that versions D and B cannot be dealt with separately and should be considered together throughout the proceedings.

The Committee finds that the PhD thesis (in both version B and D) should be considered a scientific product, in part because PhD theses report the results of the research that has been carried out in order to obtain the PhD degree. As a result, the Committee also finds that the Defendant has been academically educated, as defined in the Executive Order on the DCSD, in the area of research to which the scientific product in question relates.

Furthermore, the Committee finds that the Defendant has voluntarily released the scientific product contained in versions B and D, and that the Defendant has sufficient connections to Denmark. In reaching this conclusion, the Committee notes in particular that the Defendant voluntarily submitted the PhD thesis, in both versions B and D, to a Danish university.

On this basis the Committee finds that the PhD thesis, in both versions B and D, is covered by the Committee's remit.

In his consultation response, the Defendant argues that the Complainant has made a number of case processing errors and breached the Danish Contracts Act and the Executive Order on PhDs. The Committee notes that these areas are outside its remit.

7.2 The Committee's analysis of the case



The Committee has based its ruling on the documents mentioned in section 4 above.

The Committee finds that the case has been amply illustrated by the parties' submissions in the course of the standard consultation process.

The Committee has based its evaluation of version D of the PhD thesis on the Complainant's evidence, in the form of the annotated copy of version D of the thesis mentioned in section 5.1, in which the Complainant has highlighted a number of passages that, according to the Complainant, constitute plagiarism.

7.3 The concept of plagiarism

The Committee notes that a precise definition of the concept of plagiarism is not given in the DCSD's rules and regulations. The legislature has thus entrusted an elaboration of the concept to the DCSD, which must base its assessment on good scientific practice.

The Committee agrees that in general it is legitimate to suspect plagiarism when a text passage (of a certain length) is taken from another work (typically written by another author) without clear stressing and acknowledgement of the source. Readers must be in no doubt about which text passages are the author's own and which are quoted or paraphrased. When quoting verbatim, if the text is highlighted (e.g. in italics or quotation marks) and the source has been referred to clearly, there is no question of plagiarism.

Correct paraphrasing entails a writer processing other writers' thoughts and ideas, putting them in his or her own words and sentence structure, and providing references to the work(s) in which these thoughts and ideas are described.³ If certain sentences and words have merely been modified and no source is specified, this must be considered plagiarism.

The Committee does not think that there is a clearly defined line between what constitutes plagiarism and what does not, but considers the following wording by S. Dutch, Professor of Natural and Applied Sciences at the University of Wisconsin, a constructive guideline: "Obviously copying 1000 words verbatim without attribution is plagiarism... Is 100 words plagiarism? Almost certainly. 10? Maybe."⁴

The Committee is of the opinion that general knowledge can be described without a source reference without constituting plagiarism. General knowledge may be defined as knowledge that everybody in a particular group or a regional, institutional or academic community can be expected to possess. This includes facts about geography, history, physics, language, literature, etc.⁵

³ http://plagieringssite.tekstur.dk/filearchive/Parafrasering.pdf

⁴ www.uwgb.edu/dutchs/pseudosc/plagiarnonsense.htm (created August 2005 – last updated June 2010)

⁵ http://plagieringssite.tekstur.dk/index_flash.html



The Committee is also of the opinion that verbatim or almost verbatim quotes from other authors' texts containing background knowledge should be properly credited to the author(s) concerned.

The Committee's view is in harmony with [University's] "Rules regarding disciplinary measures against students at [University]". The rules contain the following definition of plagiarism:

"Section 3.

- (2) Plagiarism includes such cases, cf., however, subsections 3 and 4, where a written exami-nation assignment in full or in part appears to have been produced by the examinee(s) even though the assignment
- 1) includes identical or almost identical reproduction of the wording or works of other authors, and the extracts are not marked by quotation marks, italics, indentation or other clear indica-tion, including that of the source,
- 2) includes long passages with a wording which is so close to that of another work or other pro-duction etc. that comparison suggests that those passages could not have been written without the use of the other work,
- 3) includes the use of another author's wording or ideas without crediting this author in a suit-able way, or
- 4) reuses text and/or central ideas from the examinee's own previously assessed or published works without complying with the rules laid down in no. 1) and 3).
- (3) The rules laid down in subsection 2 also apply, with necessary amendments, to other types of assignments and in relation to other sources than written answers and sources.
- (4) The PhD thesis is covered by the rules laid down in subsection 2 to the extent that the PhD order does not stipulate or entail any deviations from these. ..."

It follows from section 1(2) of the above rules that they also apply to PhD students. The "Rules regarding disciplinary measures towards students at [University]" were signed by the Rector of [University] and the Head of Studies on 16 February 2009. The rules were published in [University's] set of rules and regulations and have been available on [University's] website in Danish and English versions since November 2010. Thus the rules were in force and publicly available when the Defendant submitted version D.

7.4 Same types of reuse of text in other scientific products

The Defendant contends that many people have reused text in the same way as the Defendant. In support of this contention, the Defendant attached copies of numerous scientific works, highlighting text reused from other scientific works.

The Committee notes, first of all, that the other people's breaches of good scientific practice do not relieve the Defendant of responsibility.

ractice do not reneve the Defendant of responsibility.

⁶ www.plagiat.aau.dk



This case was considered following a complaint lodged pursuant to 31(1) of the Act on Research Consulting, etc. The Committee only has a limited remit to take up cases on its own initiative (see section 31(3) of the Act). The Committee has not, therefore, ruled on the works sent by the Defendant, as they do not concern the complaint being dealt with in these proceedings.

7.5 The Committee's evaluation of selected excerpts from the PhD thesis

This section contains the Committee's analysis of 10 selected parts of versions B and D of the PhD thesis which in the opinion of the Committee constitute plagiarism

The 10 examples have been selected on the basis of the Complainant's material in the form of the annotated thesis in version D. Furthermore, the Committee has found it appropriate to include two additional examples from the thesis; see examples 5 and 6 below.

Danish Committees on Scientific Dishonesty

A list of the 10 examples is attached as an appendix to the ruling. The appendix is arranged in three columns, with the source texts in the middle column, the text in version B of the thesis in the left column and the text in version D in the right column.

Example 1 in Chapter 2 of the thesis

The Committee notes that pages 44–45 of Chapter 2 of version B of the PhD thesis cite "A Military Guide to Terrorism in the 21st Century" (2006)⁷ verbatim without reference to the source text.

The Committee further notes that in version D of the PhD thesis, the same section of text (on pages 46–47) is paraphrased from the same source text.

While this is indicated with a footnote in section 2.1 (pages 46–47), this is not the case for long passages in the rest of the chapter, including the majority of pages 57–58 and 59–60, and roughly half of pages 65–69, corresponding in total to the equivalent of five full pages of text.

In the annotated copy of the thesis submitted by the Defendant, the Defendant argues that the footnote in Section 2.1 contains a "typographical error" and should have read "this chapters" [sic] instead of "this sections" [sic]. The Committee finds this explanation insufficient to defend the nature and extent of the paraphrasing from the document cited.

The Committee therefore finds that the amount of copied text in version B and the nature of the paraphrasing in version D go far beyond what is acceptable in independent research. The Committee notes that in version D, the Defendant paraphrases by replacing words in the original text with synonyms, without clear source references or highlighting. The Committee finds that this does not constitute an

⁷ A Military Guide to Terrorism in the Twenty-First Century, U.S., Army Training and Doctrine Command, Deputy Chief of Staff for Intelligence, Assistant Deputy Chief of Staff for Intelligence – Threats, 15 August 2005, version 3.0



independent processing of thoughts and ideas expressed in the Defendant's own words and sentence structures.

In this light, the Committee finds that plagiarism did occur in this section of text in both versions B and D of the PhD thesis.

The example above is illustrated in pages 1–2 of the appendix to the ruling.

Example 2 in Chapter 3 of the thesis

The Committee notes that lines 13–22 on page 109 of Chapter 3 in version B of the PhD thesis are a verbatim reproduction of lines 18–26 on page 2 of an article by Mukherjee and Holder.⁸

The Committee further notes that the Defendant paraphrased the source text from the article in version D by making minimal changes, including replacing words (e.g. "contractors" with "outworkers", and "vendors" with "dealers"). The Committee finds that this does not constitute an independent processing of thoughts and ideas expressed in the Defendant's own words and sentence structures.

Neither version B nor version D of the PhD thesis refers to the source text.

In his consultation response of 30 July 2013, the Defendant describes this section as being "very small", and in his consultation response of 12 September 2014 he writes that "I have taken few words". The Committee does not consider the relatively short length of the passage sufficient to legitimise the reproduction.

In this light, the Committee finds that plagiarism did occur in this passage of text in both versions B and D of the PhD thesis.

The example above is illustrated on page 3 of the appendix to the ruling.

Example 3 in Chapter 3 of the thesis

The Committee notes that Chapter 3 (pages 104–107 in version B of the PhD thesis, pages 106–108 in version D) includes two text pages and a figure (3.6) that are direct reproductions from an article by Penzar and Srbljinovic⁹, without any reference to the source text.

In response to the consultation, the Defendant states that the text is taken from the article "Understanding the Structure of Terrorist Networks" IJBIDM 2(4): 401–425 (2007) by the Defendant, co-author 1 and co-author 2 (which the Defendant refers to as his PhD supervisor). The Defendant also points out that a reference to this article is included in the bibliography of the PhD thesis. The Defendant adds that it is common practice to include material from your own publications, and refers to the fact that the other named authors have acted in the same way.

 $^{^8}$ M. Mukherjee and L.B. Holder, Graph-based Data Mining on Social Networks, 2004. This article is available online, e.g. at http://www.cs.cmu.edu/~dunja/LinkKDD2004/

⁹ D. Penzar and A. Srbljinovic, About Modeling of Complex Networks with Applications to Terrorist Group Modeling, Interdisciplinary Description of Complex Systems 3(1), 27–43, 2005.



Danish Committees on Scientific

Dishonesty

It is correct that this text passage and Figure 3.6 are also found in the article by the Defendant et al. The Committee notes that this article does not contain a reference to the 2005 article by Penzar and Srbljinovic either – the article from which the text was copied.

The Committee finds that it is permissible to reuse text from one's own articles in a PhD thesis, but that the source should be acknowledged and highlighted. As the article by Penzar and Srbljinovic was published two years before the article by the Defendant et al., the Committee must base its ruling on the fact that both the thesis and the article copied from Penzar and Srbljinovic without source references.

The Committee therefore finds that the article written by Penzar and Srbljinovic was plagiarised in versions B and D of the PhD thesis.

The example above is illustrated on pages 4–6 in the appendix to the ruling.

Example 4 in Chapter 5 of the thesis

The Committee notes that a section of text in Chapter 5 of the PhD thesis (page 144 in version B, page 149 in version D) is a verbatim copy of text from the article by Penzar & Srbljinovic. 10

In his consultation response of 30 July 2013, the Defendant commented that "The accusation should be dismissed, because it has no scientific worth and background information".

The Committee notes that Chapter 5 is the introduction to the central part of the thesis, and that it constitutes a verbatim reproduction of the source text without reference.

It is the Committee's view that quotes from texts, including quotes from texts describing background knowledge, must be clearly marked and referenced. In this light, the Committee finds that plagiarism did take place.

The example above is illustrated on page 7 of the appendix to the ruling.

Example 5 in Chapter 7 of the thesis

The Committee finds that the core of the PhD thesis is the description of a software system called iMiner (investigative data-mining toolkit).

A key element of this is the iMiner knowledge base (see Figure 7.5 in the thesis). The design of such a knowledge base is described by the entities and relationships included in it, which the PhD thesis describes in Section 7.2, "System Architecture" (page 208, lines 3-25 in version B, and line 23 on page 200 to line 22 on page 201 in version D).

10 Ibid, page 28

Page1926



The Committee notes, however, that these two lists are identical to the lists of entities and relations included in the knowledge base Profiles in Terror (PIT), described in section 2 of Zhao et al. (2006)¹¹ and developed since June 2004, according to this article. No reference is made to Zhao et al. in the Defendant's thesis (neither version B nor D).

The Committee notes that the article by Zhao et al. has not been formally published in a journal, but has been available on the Internet since June 2006, ¹² and that the Defendant's PhD thesis (version B) was submitted for assessment in April 2007.

The Committee has not found publications or presentations about iMiner prior to 2007 containing the same lists of entities and relations. In principle, this does not preclude iMiner serving as a model for PIT, but the Committee bases its ruling on the fact that the Defendant, given the extensive knowledge of the literature that he demonstrates, would have drawn attention to this fact.

Replying to the Committee's conclusion that the design of iMiner was plagiarised from Zhao et al., the Defendant stated in his consultation response of 12 September 2014 that: "It is mentioned many places in the chapter that the information is mostly collected from open sources, particularly

"http://www.trackingthethreat.com". The Committee's conclusion, however, was that the database's design (its structure, its entities and relationships) and not its content, was plagiarised, and the consultation response does not refute this.

On *www.trackingthethreat.com*, including historical versions on web.archive.org, the Committee has not been able to find traces of the database design described in version B of the thesis (lines 3-25 of page 208) and version D (line 23 of page 200 to line 22 of page 201).

Therefore, the Committee maintains its conclusion that the Defendant has plagiarised the design of the central iMiner knowledge base; that is to say, the description of the entities and relationships from Zhao et al.

The example above is illustrated on pages 8-9 of the appendix to the ruling.

Example 6 in Chapter 6 of the thesis

The Committee notes that approximately 8.5 pages of text in section 6.2 of version B of the PhD thesis, which describe the "Prefuse" tool, mainly consist of a verbatim copy of the publication Heer et al., (2005)¹³ including Figure 6.2.

 $^{^{\}rm 11}$ Zhao, B., Sen, P. and Getoor, L. (2006) Entity and Relationship Labeling in Affiliation Networks

¹² The article has been available online since 16 June 2006 at http://www.cs.cmu.edu/~eairoldi/nets/icml_sna/paper7_final.pdf.
The Committee notes that the documents on this website consist of pre-proceedings of the ICML 2006 Workshop on Statistical Network Analysis, Pittsburgh, PA, held 29 June 2006.
The workshop's proceedings are published in E. Airoldi et al., editors: Statistical Network Analysis: Models, Issues, and New Directions, LNCS 4503, Springer 2007. The Committee notes that the printed proceedings do not contain the article by Zhao, Sen and Getoor, but that page 196 of the programme shows that the same authors gave a poster presentation with this title.

¹³ Heer, J., Card, S. K. and Landay, J. A. (2005) Prefuse: A Toolkit for Interactive Information Visualization. CHI 2005, April 2–7, 2005, Portland, Oregon, United States.



The Committee notes that this section has been reduced to approximately one page in version D of the PhD thesis (section 6.3).

A footnote to the section in version B states that "The matter is taken from (Heer et al., 2005)." This reference is not included in the bibliography in version B of the thesis, but is included in the bibliography of version D.

This constitutes a direct copy of significant passages from an original publication published two years previously, i.e. the whole of the section "Design of the Prefuse Toolkit" (the same title as in the Defendant's thesis).

As regards version B, the Committee finds that the extent of quotation and missing references to Heer et al.'s article in the thesis give a misleading impression of the Defendant's contribution. On this basis, the Committee considers plagiarism has occurred in version B.

Danish Committees on Scientific Dishonesty

The Committee notes that the above material is not included in section 6.3 of version D, but has been replaced by a reference. The Defendant admits this in the wording in version D: "The work mentioned in this section has been inspired and derived from (Heer et al, 2005)." Regarding version D, the Committee therefore finds that plagiarism did not occur.

The above example is illustrated on pages 10–17 of the appendix to the ruling.

Example 7 in Chapter 6 of the thesis

The Committee notes that the entire structure of section 6.3 in version B of the PhD thesis is copied from Smith & King (2002). 14

The Committee also notes that in paragraph 6.4 of version D, the Defendant has copied the source text, but replaced certain concepts with synonyms. Thus, for example, "objects" has been replaced by "entities" and "connected" by "associated". The Committee does not consider that the use of synonyms changes the passage into an expression of the Defendant's own scientific efforts.

The Committee further notes that, at the end of the paragraph in both version B and D, it is stated that the reported work "is a motivation from" [sic] research by Smith & King (2005). However, it is not stated that large parts of the text have been copied and paraphrased from Smith & King (2002), and there is no reference to Smith & King (2002) in the bibliography.

The Committee finds that both versions B and D of the text contain plagiarised passages that give a misleading picture of the Defendant's contribution.

The above example is illustrated on pages 18–19 of the appendix to the ruling.

¹⁴ Smith, M. N. and King, P. J. H. (2002) The Exploratory Construction of Database Views. Research Report: Birkbeck College Research Report BBKCS-02-02.

¹⁵ Smith, M. N. and King P. J. H. 2005. A Database Interface for Link Analysis, Journal of Database Management, vol. 16(1), pp. 60-74.



Example 8 in Chapter 4 of the thesis

The Committee notes that approximately half of section 4.4 in version B, which comprises the summary of Chapter 4, is copied from Stephenson & Zelen (1989) without reference. The Committee further notes that the same passage is repeated in Section 9.2 of version B, under the title "Thesis contributions". In this light, the Committee finds that plagiarism did occur in both of these sections in version B.

The Committee notes that in version D the passage has been deleted from section 4.4, but retained in section 9.2. The latter contains a reference to Stephenson & Zelen (1989), but without the copied text being marked as copied. Because the reader is not informed that the text has been copied verbatim, the Committee considers that this part of section 9.2 in version D also constitutes plagiarism.

The above example is illustrated on page 20 of the appendix to the ruling.

Danish Committees on Scientific Dishonesty

Example 9 in Chapter 7 of the thesis

The Committee notes that Chapter 7.1,"Investigative data mining toolkit" (Section 21 in version B), contains two sections of 21 lines each that, for the most part, consist of a verbatim reproduction of a text by Xu, J.J. and Chen, H. (2005)¹⁷ and Perer & Schneiderman (2006).¹⁸

The references to the source texts in this passage are all included in the bibliography in version B. However, the text itself contains no references to Xu, J.J. and Chen, H. (2005) and Perer & Schneiderman (2006), from which the text and references to source texts have been copied. The Committee finds that this gives a misleading impression of the Defendant's contribution and, accordingly, that the section in version B constitutes plagiarism.

The Committee also notes that the majority of the text in section 7.1 of version B, which is a direct copy from Xu, J.J. and Chen, H. (2005) and Perer & Schneiderman (2006), has been omitted in section 7.1 of version D. The Committee finds that parts of section 7.1. of version D are paraphrased without reference to the source text by Xu, J.J. and Chen, H. (2005). The Committee also notes that parts of the section in version D of the thesis, too, have been copied directly from source text Perer & Schneiderman (2006) without informing the reader. In this light, the Committee finds that plagiarism also occurred in version D.

The above example is illustrated on pages 21-23 of the appendix to the ruling.

Example 10 in Chapter 9 of the thesis

¹⁶Stephenson, K. and Zelen, M. (1989) Rethinking Centrality: Methods and Examples. Social Networks 11: 1-37

¹⁷ Xu, J. J. and Chen, H. (2005) CrimeNet Explorer: A Framework for the Criminal Network Knowledge Discovery. ACM Transactions on Information Systems, 23(2), April 2005, pp. 201-226.

¹⁸ Perer, A. and Schneiderman, B. (2006) Balancing Systematic and Flexible Exploration of Social Networks. IEEE Transactions on Visualization and Computer Graphics, 12(5): pp. 693-700.



The Committee notes that parts of sections 9.2 "Thesis contributions", section 9.3 "Recommendations for future research" and section 9.4 "Summary" in version B of the thesis have been copied from Saxena et al. (2004)¹⁹, Ressler (2006)²⁰, Lemieux (2003)²¹ and Hamill (2006)²².

The Committee also notes that both versions B and D of the Defendant's thesis contain a reference to Ressler (2006), but only in connection with a particular conclusion, while the reader is not informed that a whole passage in the summary has been copied from this text. References to the other three works mentioned above are not included in the version B, but have been inserted in version D of the thesis.

Finally, the Committee notes that the above-mentioned sections have been reworded in version D with the exception of the concluding section 9.4 "Summary", which has been copied from Hamill (2003), though some phrases have been replaced with others. The word "enemy", for example, has been replaced with "structure of these networks", and "appropriate communities" with "analysts".

Danish Committees on Scientific Dishonesty

In his consultation response, the Defendant commented: "I accept this error, maybe because of sloppy notes, I forgot to mention the reference to this very small passage."

The Committee does not find that this is a short passage, as it consists of the whole of the final summary of the PhD thesis. By way of summary, the Committee therefore finds that the text in both version B and version D gives a highly misleading impression of the Defendant's contributions. In this light, the Committee finds that this section of text constitutes plagiarism in both version B and version D.

The above example is illustrated on pages 24-34 of the appendix to the ruling.

7.6 Other points of contention

The Complainant also submitted a number of criticisms about:

- Paraphrasing of other texts with source references
- Wikipedia is given as a source

Regarding the Complainant's criticism about paraphrasing with source reference in the thesis, the Committee notes that proper paraphrasing with source references entails that the reader is left in no doubt about which passages have been paraphrased. In such a case, there will be no question of plagiarism.

ed Police, Institute of Technology, Wright-Patterson Air Force Base, Ohio, USA, Sept. 2006.

¹⁹ Saxena, P., Santhanam, K. and Basu, A. (2004) Application of Social Network Analysis (SNA) to Terrorist Networks in Jammu & Kashmir. Strategic Analysis, vol. 28, No. I, Jan-Mar 2004.

²⁰ Ressler, S. (2006) Social Network Analysis as an Approach to Combat Terrorism: Past, Present, and Future Research. Homeland Security Affairs, vol. II, no. 2 (July 2006) http://www.hsaj.org

²¹ Lemieux, V. (2003) Criminal Networks. Research and Evaluation Branch, Community, Contract and Aboriginal Policing Services Directorate, Royal Canadian Mounted Police

²² Hamill, J. T. (2006) Analysis of Layered Social Networks. PhD Thesis, Air Force Lemieux, V. (2003) Criminal Networks. Research and Evaluation Branch, Community, Contract and Aboriginal Policing Services Directorate, Royal Canadian Mount-



As regards the extent of direct copying and paraphrasing without source reference in the remaining part of the case, the Committee finds no reason to go into further detail in all the examples of paraphrasing in version B and D of the Defendant's thesis.

The Complainant's contention regarding the use of Wikipedia as a source relates to section 3.7.2 of version D of the Defendant's thesis, "Case 2: Riyadh Bombing Terrorists Network", as well as section 3.7.3, "Case 3: USS Cole Terrorist Network".

The Committee notes that in the headlines of sections 3.7.2 and 3.7.3 in both version B and D, a reference has been inserted stating that: "The most of the text is taken from http://en.wikipedia.org/wiki/Riyadh_Compound_Bombings" (section 3.7.2) and "The most of the text for this section is taken from http://www.globalsecurity.org/security/profiles/uss cole bombing.htm and http://en.wikipedia.org/wiki/USS Cole bombing" (section 3.7.3).

The Committee notes that in section 3.7.2 of version D, the whole of page 125 and the first two paragraphs of page 126 have been copied from the above-mentioned Wikipedia page.²³ The Committee has not been able to identify copying from Wikipedia in other parts of sections 3.7.2 and 3.7.3 in version D.

The Committee does not consider that the use of Wikipedia as a source in itself is necessarily in conflict with good scientific practice in cases where a reference is entered correctly. However, it is crucial that the source is indicated, since the author himself may have authored the Wikipedia article, and in principle reservations should be stated regarding the validity of the cited information.

In this case, the Committee finds that a clear reference was made to the source, and that plagiarism did not occur.

7.7 Is the reuse of texts a serious breach of good scientific practice?

It is the Committee's assessment that large portions of both versions B and D of the Defendant's PhD thesis have been plagiarised, as illustrated by the examples provided in section 7.5 above. This applies to the introductory sections that give background material, the central parts of the thesis and its conclusions. In several cases, the original sources are not mentioned. In others they are, but not in their specific context or in a way that makes it clear which parts of the text in the PhD thesis have been copied or paraphrased.

The Committee considers the plagiarism in example 5 and example 10 especially serious: example 5 concerning iMiner because it casts doubt on whether the PhD thesis presents any new research; and example 10 because the plagiarised text here constitutes the entire final summary of the thesis.

On this basis, the Committee rules that the plagiarism in both version B and D of the PhD thesis constitutes a serious breach of good scientific practice.

7.8 Intentional or gross negligence

²³ This is a version of Wikipedia from 2007.



The Defendant contends that he did not know about the rules concerning plagiarism and therefore cannot be held responsible for such breaches. The Defendant also contends that he did not receive the requisite amount of supervision when writing his PhD thesis, and did not participate in compulsory PhD courses.

It is the Committee's opinion that the Defendant's possible lack of knowledge of the rules on plagiarism, including the particular rules of [University] mentioned above in section 7.3, does not exempt him from responsibility. In particular, the Committee notes that, before submitting version D of the thesis, the Defendant has had the opportunity to familiarise himself with the rules on plagiarism after the Defendant was made aware of the suspicion of plagiarism in version B.

The Committee stresses that the Defendant was co-author of a number of published academic articles prior to writing version B of the PhD thesis. The Committee is aware that the Defendant has published at least 13 scientific articles and contributed to several textbooks. In this light, the Defendant must be considered an experienced researcher, and must therefore be expected to have knowledge of good scientific practice. The Committee also notes that, before completing version B of the thesis, the Defendant had acquired an MSc from [University] in the UK.²⁴

As stated above in section 7.5, it is the Committee's assessment that the Defendant's thesis contains numerous examples of plagiarism in the thesis. The Defendant's thesis contains numerous examples of incorrect paraphrasing as well, which is tantamount to plagiarism. It must be noted that the Defendant has committed the plagiarism while knowing that the specific passages come from other publications, etc. On this basis the Committee considers that there has been intent to plagiarise.

Overall, it is the Committee's considered opinion that the Defendant committed the acts of plagiarism mentioned in item 7.5 intentionally.

The fact that the Defendant has not been enrolled in or completed a PhD programme at the University, but that the PhD thesis was nevertheless accepted for grading (since the University considered that the Defendant had acquired qualifications in other ways that could be equated with completing a PhD programme) is not considered to change this assessment.

7.9 Summary

The Committee finds that large portions of both versions B and D of the Defendant's thesis have been plagiarised, and that, overall, this constitutes a serious breach of good scientific practice.

As noted in Section 7.8, the Committee also finds that the Defendant committed this plagiarism intentionally.

In summary, the Committee finds that the Defendant did act in a scientifically dishonest manner by means of plagiarism (cf. 2, no. 5 of Executive Order no. 306 of

 $^{^{24}}$ International Journal of Networking and Virtual Organizations 2011 - vol. 8, no. 1/2 pp. 52-74



20 April 2009 on the Committees on Scientific Dishonesty, as amended by Executive Order no. 144 of 20 February 2012) when drafting and reporting on research results for the following scientific product:

• The PhD thesis: Investigative Data Mining: Mathematical Models for Analyzing, Visualizing and Destabilizing Terrorist Networks.

8. Appeals procedure

This ruling cannot be appealed to any other administrative body, cf. Section 34 of Act no. 365 of 10 September 2014 on Research Consulting, etc.

Yours sincerely,

Henrik Gunst Andersen Chair of the Danish Committees on Scientific Dishonesty