Quoting or Plagiarizing? - Good Scientific Practice

Dr. Dana Zöllner
Graduate Academy
Otto von Guericke University Magdeburg

Real Life Example

Title: xxx

Computational Materials Science

Dear Dr. xxx,

Thanks for submitting your manuscript to Computational Materials Science. However it does not meet the journal's desired standard, as the CrossCheck report indicates that the wording is overly similar to the wording of already published papers. We regret to inform you that we cannot admit the manuscript into the formal peer review process.

Yours sincerely,

Editor in Chief Computational Materials Science

Real Life Example

Title: xxx

Computational Materials Science

Dear Dr. xxx,

Thanks for submitting your manuscript to Computational Materials Science. However it does not meet the journal's desired standard, as the CrossCheck report indicates that the wording is overly similar to the wording of already published papers. We regret to inform you that we cannot admit the manuscript into the formal peer review process.

Yours sincerely,

Editor in Chief Computational Materials Science



Content

- Definition
- Ethics of Science
- Statements by the DFG
- Publication Practices by Journals
- Plagiarism as a Real Life Problem?
- What happens in Case of Misconduct?
- Self-Plagiarism?

Plagiarism is the representation of another author's thoughts, ideas, or even expressions as one's own original work.

just copy & paste = stealing someone's intellectual property

- Plagiarism is the representation of another author's thoughts, ideas, or even expressions as one's own original work.
- just copy & paste = stealing someone's intellectual property
 - not only direct copying of text is plagiarism
 - also unmarked translations
 - ▶ the use of someone else's figures, schemes, ideas etc.

- Plagiarism is the representation of another author's thoughts, ideas, or even expressions as one's own original work.
- just copy & paste = stealing someone's intellectual property
 - not only direct copying of text is plagiarism
 - also unmarked translations
 - ▶ the use of someone else's figures, schemes, ideas etc.

... unless you cite the original author!

- Plagiarism is the representation of another author's thoughts, ideas, or even expressions as one's own original work.
- just copy & paste = stealing someone's intellectual property
 - not only direct copying of text is plagiarism
 - also unmarked translations
 - ▶ the use of someone else's figures, schemes, ideas etc.
- ... unless you cite the original author!
 - → Good Scientific Practice

Ethics of Science

- Ethics of science deals with all ethical implications of scientific research.
- In particular, ethics sets criteria for good and bad actions.

→ What to do and what not to do!

Ethics of Science I

- ethics of science regarding the scientific community:
 - recommendations for action that all scientists should follow
 - in general: intellectual honesty, not to falsify results, ...
 - > specific: subject-related, e.g., in medicine

Ethics of Science II

- ethics of science regarding the scientific community:
 - recommendations for action that all scientists should follow
 - in general: intellectual honesty, not to falsify results, ...
 - > specific: subject-related, e.g., in medicine

- ethics of science regarding transfer:
 - > animal experiments, genetic engineering, nuclear research

- Guidelines for Safeguarding: Good Research Practice
- from "organisational responsibility of heads of research institutions" to "legal and ethical frameworks, usage rights", from "documentation" to "authorship"

- Guidelines for Safeguarding: Good Research Practice
- Authorship: "An author is an individual who has made a genuine, identifiable contribution to the content of a research publication of text, data or software. All authors agree on the final version of the work to be published. Unless explicitly stated otherwise, they share responsibility for the publication. Authors seek to ensure that, as far as possible, their contributions are identified by publishers or infrastructure providers such that they can be correctly cited by users."

- ► <u>Guidelines for Safeguarding: Good Research Practice</u>
- genuine contribution?
 - development and conceptual design of the research project, or
 - collection, acquisition or provision of data, software etc. or
 - analysis/evaluation or interpretation of data, or
 - drafting of the manuscript.

- Guidelines for Safeguarding: Good Research Practice
- genuine contribution?
 - development and conceptual design of the research project, or
 - collection, acquisition or provision of data, software etc. or
 - analysis/evaluation or interpretation of data, or
 - drafting of the manuscript.
- no genuine contribution?
 - individual's support may be acknowledged e.g. in footnotes!

Publication Practices by Journals

- e.g., NATURE
- ... plagiarism and fabrication
- "Plagiarism is unacknowledged copying or an attempt to misattribute original authorship, whether of ideas, text or results. As defined by the ORI (Office of Research Integrity), plagiarism can include, "theft or misappropriation of intellectual property and the substantial unattributed textual copying of another's work". Plagiarism can be said to have clearly occurred when large chunks of text have been cut-and-pasted without appropriate and unambiguous attribution."

Publication Practices by Journals

- e.g., NATURE
- ... plagiarism and fabrication
- Similarity Check = software that screens manuscripts for text overlap
- https://www.crossref.org/services/similarity-check/
- https://www.ithenticate.com/pricing
- ... unfortunately not for free ...

- Guttenberg plagiarism scandal in 2011 = first large scandal
 - first accusations
 - rejection by von Guttenberg ("absurd")
 - then acknowledged that he made "mistakes" in the footnotes
 - ▶ it came out that he inserted a report from the Bundestag's research department into his thesis without citation!
 - still denied that it was on purpose
 - but more and more evidence
 - Bayreuth University withdrew his doctorate
 - Guttenberg resigned as Minister of Defense

- Guttenberg plagiarism scandal in 2011 = first large scandal
 - first accusations
 - rejection by von Guttenberg ("absurd")
 - then acknowledged that he made "mistakes" in the footnotes
 - ▶ it came out that he inserted a report from the Bundestag's research department into his thesis without citation!
 - still denied that it was on purpose
 - but more and more evidence
 - Bayreuth University withdrew his doctorate
 - Guttenberg resigned as Minister of Defense

... all of this within a month

- Guttenberg plagiarism scandal in 2011 = first lar
 - first accusations
 - rejection by von Guttenberg ("absur"
 - then acknowledged that he
 - it came out that he in the Bundestag's research department into citation!
 - still denie
 - ▶ but vidence
 - ersity withdrew his doctorate
 - erg resigned as Minister of Defense

... all of this within a month

the footnotes

- unfortunately not ...
 - Silvana Koch-Mehrin, politician, withdrawal in 2011
 - Annette Schavan, politician, withdrawal in 2013
 - Ursula von der Leyen, politician, investigation in 2015
 - Franziska Giffey, politician, withdrawal in 2021

- unfortunately not ...
 - Silvana Koch-Mehrin, politician, withdrawal in 2011
 - Annette Schavan, politician, withdrawal in 2013
 - Ursula von der Leyen, politician, investigation in 2015
 - Franziska Giffey, politician, withdrawal in 2021
- Problem: There is no legal definition of plagiarism in Germany.
- But: copyright (Urheberrecht) is

- study by Sebastian Sattler in 2006 found of 159 homework assignments of students 19.5% contained plagiarisms¹
- newer study found in 2013 in 17.8% of students works plagiarisms²
- also in 2013, study at University of Graz showed that 1/3 of the students have used plagiarisms at least once³

¹ [S. Sattler. Plagiate in Hausarbeiten. Erklärungsmodelle mit Hilfe der Rational Choice Theorie. Hamburg (2007)]

² [S. Sattler, P. Graeff, S. Willen. Deviant Behavior 34 (2013) 444]

³ [G. Reichmann. In: Information. Wissenschaft & Praxis 64 (2013) 179]

- but, it is not just students, also researchers do it
 - → tracking plagiarism is a real problem for journals
- software (Similarity Check) helps find duplicates in publishes papers

- but, it is not just students, also researchers do it
 - > tracking plagiarism is a real problem for journals
- software (Similarity Check) helps find duplicates in publishes papers

Real Life Story:

- cooperation partners could not agree on publication yet
- one partner went ahead and submitted manuscript to pay journal
- manuscript got accepted
- same partner submitted it again to renowned journal ...

- but, it is not just students, also researchers do it
 - → tracking plagiarism is a real problem for journals
- software (Similarity Check) helps find duplicates in publishes papers

- but, it is not just students, also researchers do it
 - > tracking plagiarism is a real problem for journals
- software (Similarity Check) helps find duplicates in publishes papers
- usually not searching in Bachelor or Master theses
- usually not searching in old books
- usually limited to one language (English), translation plagiarism?

What Happens in Case of Misconduct?

- students:
 - homework or thesis is rejected
 - in a severe case, exmatriculation
 - title can be withdrawn (even years later)
 - job loss?
- PhD thesis:
 - withdrawal of doctorate
 - legal consequences at court?
 - job loss?

What Happens in Case of Misconduct?

- researcher:
 - journal article is rejected
 - as editors and referees are international colleagues, your reputation will suffer
 - > stricter review in future
 - no more invitations to conferences
 - no more cooperation
 - journal article can be withdrawn also years later, a note will be placed to explain the "missing" article
 - consequences at university? Some have very strict rules!
 - warning
 - job loss

Self-Plagiarism?

- remember the first example?
- it is a self-plagiarism
 - = technically, a contradiction in itself
 - reuse of one's own scientific work without citing the original work
- Prof. Wolfgang Löwer (DFG Ombudsperson for Science): "So-called self-plagiarism does not exist - because that would mean that it would be possible to steal from oneself."¹

1 [translated from: Franz Himpsl: Promotion: Können Doktoranden aus Versehen plagiieren? In: Die Zeit. Nr. 6 (2014)]

Self-Plagiarism?

- Is it self-plagiarism if parts from the PhD thesis are published a second time?
- according to DFG guidelines: yes, unless they cite one another
- but: often publications are expected before PhD thesis submission
- also: PhD students should present their results at conferences
- technically: thesis is then not original own research
- solution: some universities/institutes allow cumulative PhD theses

How to do it correctly?

- need/want to take a sentence or section literally from a publication?
 - mark it by "" and give the reference
- want to use a specific idea that has been published?
 - give the reference
- want to paraphrase (reformulate) something?
 - give the reference
- want to use something from a paper published in a different language?
 - translate, state that it is translated, and give a reference
- need to refer to an image or table in a publication?
 - don't copy it, just give a reference