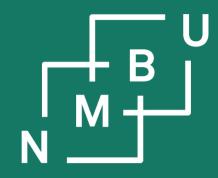
Institutt for datavitskap



Noregs miljø- og biovitskaplege universitet



DAT390 Data science seminar **4** Research impact and ethics

4.1 Plagiarism vs. copyright4.2 What is needed for the nearly finished report?

4.3 Re-use of own material (so-called "selfplagiarism") DAT 390

### Talk schedule for today

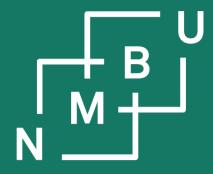
#### Monday, 7<sup>h</sup> October 2024

14:15	Lecture 4.1.	Plagiarism vs. copyright
14:45	Jon Markus B. Berg	Literature: Spiked neural networks.
		Feedback from: Harald N. Stabbetorp and Sudeepika W. S. Liyanapathiranage
15:15	Harald N. Stabbetorp	Literature: Some new kind of neural networks and its application within robotics.
		Feedback from: Nora Mikarlsen and Julie T. Vestby
15:30	P. Khanh Le	Literature: Auto diagnosis from medical images with the focus on
		Uncertainty analysis and Explainable AI (XAI).
		Feedback from: Julie T. Vestby and Nora Mikarlsen
15:45	Bjørn Eirik R. Nordbak	Literature: Leveraging operational data from offshore wind farms for machine learning applications.
		Feedback from: Abdiaziz Mahamuud and Kim Son Ly

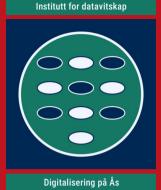
### Talk schedule for next week

#### Monday, 14<sup>th</sup> October 2024

14:15	Annalena Baer	Literature: Anomaly detection in the purchase-to-pay process.
		Feedback from: Ingebrigt Kjæreng and Anne Celine N. Weiseth
14:30	Ingebrigt Kjæreng	Literature: Sentralbankens og føderale myndigheters handlinger under inflasjon og fremtidig inflasjon.
		Feedback from: Annalena Baer and Dinussen Sivarasalingam
14:45	Sudeepika W. S. Liyanapathiranage	Literature: Time series forecasting with echo state networks.
		Feedback from: Anne Celine N. Weiseth and Jon Markus B. Berg
16:30	SIMULA	SIMULA MASTER DAY @Oslo



Noregs miljø- og biovitskaplege universitet



# 4 Research impact and ethics

## 4.1 Plagiarism vs. copyright

4.2 What is needed for the nearly finished report?4.3 Re-use of own material (so-called "self-plagiarism")

DAT390

### **DON'T plagiarize!**

ALL reports will be checked for plagiarism

All earlier reports are stored in the program that checks for plagiarism

You risk exclusion from all Norwegian universities for up to a year!

#### Seminar about plagiarism: https://www.tekna.no/kurs/juks-og-fanteri---ellerbare-darlig-ti--48496/

## Plagiarism

Original text from Sterrat et al., (2011)

The complexity of nervous systems make it very difficult to theorise cogently about how such systems are put together and how they function.

#### It is plagiarism if you write

The complexity of nervous systems make it very hard to theorise cogently about how such systems are built up and how they function (Sterrat *et al.*, 2011).

#### It is not plagiarism if you write

" The complexity of nervous systems make it very difficult to theorise cogently about how such systems are put together and how they function." (Sterrat *et al.*, 2011).

#### Or

According to Sterrat et al. [1], ...

## NMBU's regulations on academic misconduct (fusk)

The relevant document is called "<u>Retningslinjer</u> - behandling av mistanke om fusk eller annen uredelig opptreden ved NMBU" (the Norwegian version was last changed 19.9.2024).

3.1 Cheating is any act aimed at giving the student an unwarranted study result or an unjustified advantage in evaluating the student achievement.

The legal basis for this is given in **universitets- og høyskoleloven (uhl.)**: –<u>uhl. § 4-7 (1) b</u> states that exam results etc. can be annulled in case of <mark>cheating</mark> (fusk) or an <mark>attempt at cheating.</mark>

-<u>uhl. § 4-8 (3)</u> states that whoever acts as described in <u>§ 4-7 (1)</u> or contributes to it can be expelled (utestengt) for up to one year.

-No definition of cheating is given in the law. The word "fusk" is just used as is.

It is interesting that the law assumes that "har forsøkt å fuske" is different from "har fusket," as it mentions both separately. NMBU however gives a definition according to which the attempt to "fusk" already is a "fusk."

https://www.nmbu.no/studenter/retningslinjer-behandling-av-mistanke-om-fusk-eller-annen-uredelig-opptreden-ved-nmbu

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3.1 Cheating is any act aimed at giving the student an unwarranted study result or an unjustified advantage in evaluating the student achievement.

This definition under point 3.1 is only followed by examples under point 3.2:

«[...] F. Cheating may consist in the fact that a submitted assignment has been prepared by another person than the one listed as the examinee.

G. Plagiarism is cheating. Examples of plagiarism: Reproduction or quotes from books, articles, websites, own or others' assignments, use of images, graphs and the like without source reference, quotation mark or other acknowledgment in the text / picture / drawing showing where the material is taken from.

H. Cheating may consist in the fact that a written answer has been used by the examinee himself for a previous examination, unless such use is agreed upon with the course responsible. [...]»

It seems that point 3.2 is only intended as an illustration of point 3.1.

### Plagiarism versus "plagiarism detection software"

Plagiarism detectors can help detect cheating. They don't define plagiarism.

- You can have no similarity at the text level, but still commit plagiarism.
- "I have to rewrite or paraphrase the text" (maybe using ChatGPT?).
- No! Others' academic works don't become yours by paraphrasing.
- High similarity scores in no way mean that plagiarism really occurred.
- Maybe you are using a form or template that many are using.
- Even reusing text verbatim can be legitimate, distinct from plagiarism, and not requiring direct quotation marks or even a citation.

• Example: A uses B's text to learn Norwegian, taking over many Norwegian idioms from B's text. None of the scientific content is taken from B, and A's work is on a different topic. B's work was only used as a language learning resource. It does not need to be cited.

NMBU's plagiarism detector is called "**Ouriginal**." Do not use it to "find out if you committed plagiarism." This does not make sense. You already know.

(https://secure.urkund.com/account/en-US/auth/login) and (https://www.ouriginal.com/guides-tutorials/)

<u>Plagiarism detectors</u> can help detect cheating. They <u>don't define plagiarism</u>.

OK, but <u>what is plagiarism then</u>, really?

NMBU's retningslinjer om fusk 3.1G do not define plagiarism, but give a series of examples:

«[...] G. Plagiarism is cheating. Examples of plagiarism: Reproduction or quotes from books, articles, websites, own or others' assignments, use of images, graphs and the like without source reference, quotation mark or other acknowledgment in the text / picture / drawing showing where the material is taken from.

H. Cheating may consist in the fact that a written answer has been used by the examinee himself for a previous examination, unless such use is agreed upon with the course responsible. [...]»

This is not a definition, but makes it clear that "self-plagiarism" is considered plagiarism, and that this includes reuse of work from previous theses/exams. However, it is then not clear why points *G* and *H* are listed separately.

#### UHR: Universitets- og høgskolerådet<sup>1</sup> (2012)

UHR's first definition: «Hva er plagiering? <u>Meget forenklet</u> kan vi si at **å plagiere er å presentere andres arbeid, herunder tanker og ideer, som sitt eget**.»

However, UHR does not continue to rely on this "very simplified" definition.

The same report goes on to write: «Studenten kan også plagiere seg selv: Når studenten helt eller delvis bruker egne tidligere innleverte arbeider i nye innleveringer, uten å oppgi det, kalles det gjerne selvplagiering.»

This is followed by a list of six examples of plagiarism. The sixth one is "self-plagiarism," which is then subsumed under plagiarism. However, no new, better definition of plagiarism is given instead of the first "very simplified" one.

<sup>1</sup>UHR, <u>Plagiering i universitets- og høgskolesektoren: Felles problem, felles ansvar,</u> **2012**.

#### Research ethics guidelines for natural science and technology<sup>1</sup> (2015)

These Norwegian guidelines,<sup>1</sup> developed by the NENT committee, assert: «Å plagiere innebærer å framstille andres ideer eller forskning som sitt eget.»

This is inconsistent with the idea of "self-plagiarism" as a kind of "plagiarism."

<sup>1</sup>NENT, *Forskningsetiske retningslinjer for naturvitenskap og teknologi*, FEK, **2015**.

#### Project RINO: Research Integrity in Norway<sup>1</sup> (2018)

The RINO project was carried out by *De nasjonale forskningsetiske komiteene* (*FEK*) in collaboration with UiB and HVL. It was centered on research integrity as the opposite of "forgery, fabrication, and plagiarism" (FFP).

Plagiarism is defined in this project by: "Å fremstille andres arbeid (ideer, materiale, tekst) som sitt eget ved å utelate henvisning til opphavskilden".<sup>1</sup>

Their report<sup>1</sup> finds that 90.1% of Norwegian research institutions' employees regard plagiarism, as defined above, as a "very problematic" behaviour. The fraction who find it "very problematic" or "quite problematic" is 98.5%.

(Remark: This is probably only because "copying your own work" is excluded.)

<sup>1</sup>J. Hjellbrekke et al., <u>Etikk og integritet i forskning: Resultater fra en landsomfattende undersøkelse</u>, **2018**.

### Plagiarism and copyright are different issues

#### It is possible to commit a copyright infringement without plagiarism.

– Example: A publishes an opinion piece on a streaming platform, under a license that does not permit commercial reuse. B has a monetized channel on that platform and publishes a reaction video that consists of A's content and B's trivial reactions. B does not obscure A's authorship.

– Copyright infringement is a matter of <mark>penal law</mark> (strafferett) following <u>åndverksloven §§ 79 and 80</u>. It is a matter of <mark>civil law</mark> (privatrett), specially liability (erstatningsansvar), following <u>åndverksloven § 81.</u>

- You have the right to fair use for citation (sitatrett) of others' material:
- As part of the public debate, including academic discussions, you can use direct quotes and reproduce part of others' work verbatim.
- In the example, *B*'s use of *A*'s material would be legitimate if *B* was engaging in a genuine, non-trivial way with the original content.
- The right to fair use for citation is grounded in <u>andverksloven § 29.</u>

### Plagiarism and copyright are different issues

#### It is possible to commit plagiarism without a copyright infringement.

Example: A hires B as a contractor to write technical documentation for A's code. The contract clarifies that A owns the documentation.
A publishes a paper in a scientific journal. Part of the documentation is included as an Appendix. It is not mentioned that B wrote that text.

- Depending on circumstances, plagiarism may be completely legal.

• The above is probably illegal by being in violation of the terms and conditions of the journal's publisher, with whom A has a contract. But if there is no such contract, it is legal, but it is still plagiarism. Irrespective, it is no copyright violation, since A owns the copyright.

- A can sell the code and documentation to C without mentioning B.
- Primarily, plagiarism is a matter of research ethics, not the law.
- Norway, however, also has a law specifically about research ethics.
- Forskningsetikkloven § 8 mentions<sup>1</sup> plagiarism as form of "uredelighet."

<sup>1</sup>Unfortunately, the law only mentions plagiarism, but does not define it.

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Plagiarism in an examination setting is a case of misconduct (fusk).
 It is regulated as a matter of administrative law (forvaltningsrett).