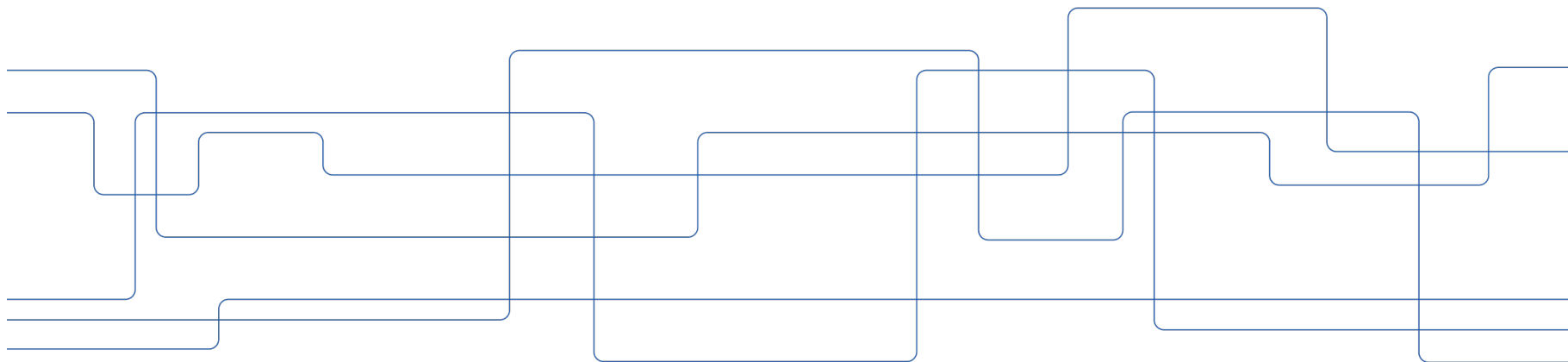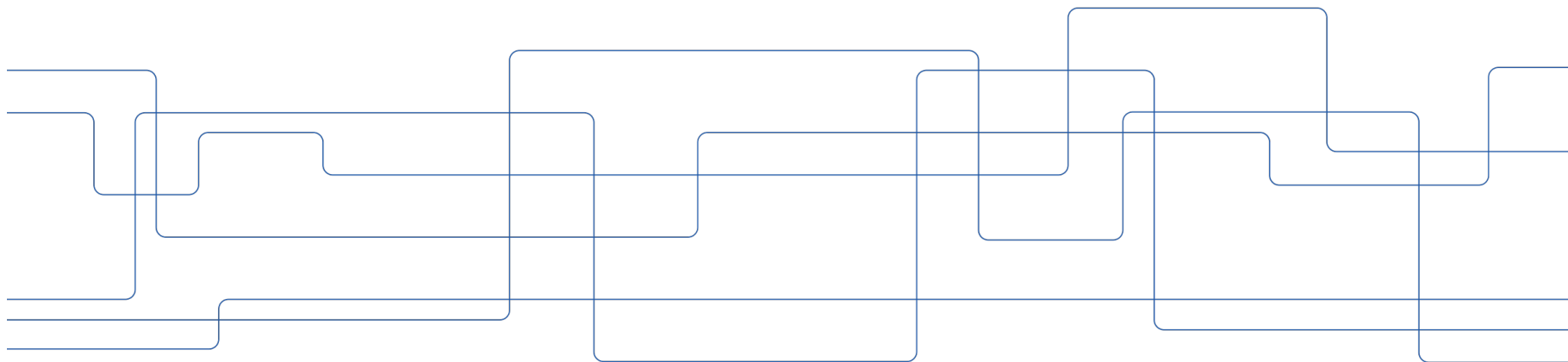# Writing your project report for DA150X

Susanna Lyne, KTH Language and Communication

21 March 2023

Part 2: The scientific language: concise, clear and correct

- We write to communicate

- We write because we have something to say

- We write because we need to display our knowledge

Therefore, scientific writing needs to be concise, precise and stylistically appropriate
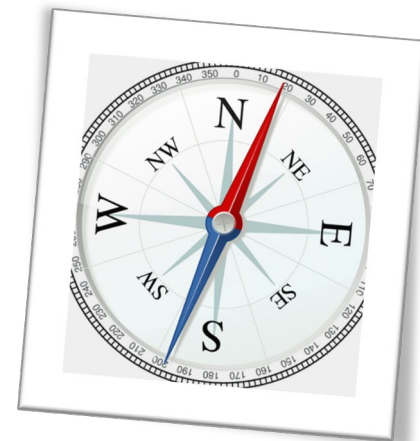
The KTH Guide to Scientific Writing in English

www.kth.se/writingguide

Includes:

- Sentence structure

- Punctuation

- Text flow

- Scientific style

- Recommendations

- Dos and dont's.

Four important features of reader-friendly scientific style

Conciseness	Clarity and precision
Neutral-to-formal style	Correctness

Scientific texts are *concise*

- They express complex ideas in as few words as possible

- The author must carefully decide *which information to include* and what parts to leave out.

- The words chosen carry as much meaning as possible (this ties in with *style* and *clarity* as well)

Conciseness

✖ The website **has made available many of the things you can use for making a decision on** the best dentist.

✔ The website **presents** a list of **criteria for determining** the best dentist.

De-personalise using e.g. a *preposition* + *ing*-structure

Same principle in Swedish

Undersökningens syfte är först och främst att undersöka <u>hur barn och ungdomar talar till vardags</u> och om de i så fall brukar använda slang. ✖

Denna rapport undersöker barns och ungdomars <u>vardagliga användning</u> av slang. ✔

Scientific texts are *precise*

Quite a small portion of the…

→ Only 10.5 % of the…

School pupils

→ fifth- to eighth-grade pupils

Some municipalities in Sweden

→ Four municipalities in Sweden: Kiruna, Hudiksvall, Laxå and Varberg.

A *mobile device* -- a *smartphone* -- a *Samsung Galaxy S4?*

Use precise words

do *make*	Tests were done We did experiments Calculations were made	Tests were performed We conducted a set of experiments *X was calculated*
get	We got good results	We *obtained (achieved) significant/clear results*
give	We gave the participants a headset each.	We *provided (equipped) each participant* with a headset

...and some Swedish equivalents

göra	Experiment gjordes	*genomfördes, utfördes*
få	Vi fick bra resultat	Testerna genererade tydliga resultat
Ta (ta fram, ta upp)	Materialet som togs fram har… Det som tas upp i det här avsnittet är…	Det utvalda materialet har… De *problem* som *behandlas*

Quick task: Look for e.g. "were done" or "is made" in your texts.

do *make*	Tests were done We did experiments Calculations were made	Tests were performed We conducted a set of experiments *X was calculated*
get	We got good results	We *obtained (achieved)* *significant/clear results*
give	We gave the participants a headset each.	We *provided (equipped) each* *participant* with a headset

Scientific texts are reader-friendly

Reader-friendliness: avoid top-heavy sentences

a. The conclusion that X was the most suitable method for testing Y's binding abilities to different Zs was drawn. ✘

b. The conclusion was drawn that X was the most suitable method for testing Y's binding abilities to different Zs. ✔

Long subjects make sentences hard to read.

Common problem: top-heavy sentences

- *In this study, <u>a three-dimensional</u> … of a … as well as a…, <u>is investigated</u>.* ✖

- *In this study, a three-dimensional X is investigated. This system is characterised by a…* ✔

Short sentence first, then details.

Connect sentences using *This* + noun.

Short subject: Agreement made easier

?

However, doubts about the feasibility of this solution **has/have been** raised.
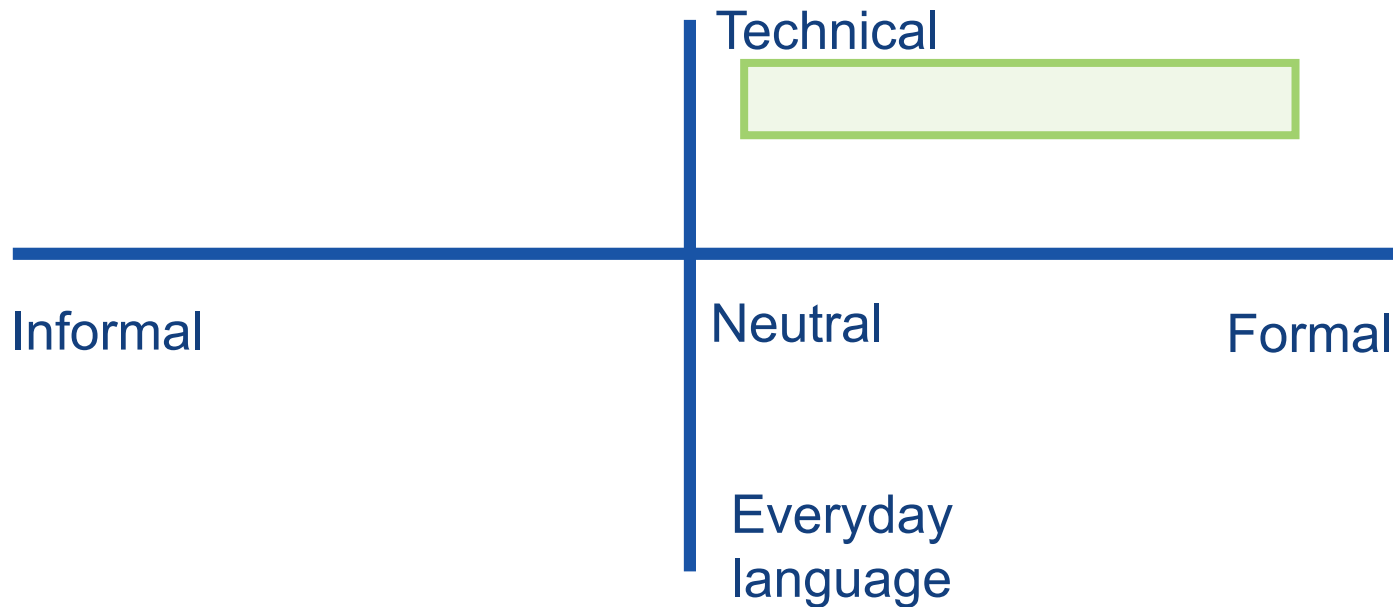
Avoid the problem by moving the verb

✓

Doubts **have been raised** about the feasibility of the solution.

Scientific style: the neutral-to-formal register

Informal   Neutral   Formal

Scientific style: how technical?

Technical

Informal
Neutral
Formal

Everyday
language

Write to inform, not to impress!

Scientific style: neutral-to-formal

The KTH Guide to Scientific Writing   www.kth.se/writingguide

Scientific style:

- Avoid *you* and *one*

- Avoid contractions

- Avoid *a lot of*

- Avoid direct questions

- Avoid phrasal verbs (such as *keep up with*)

Conciseness and style: Avoid writing *you*

? When **you** use the phone **you** may find that the connection is slower than it should be.

✓ In most cases, _the user_ will *experience* that the connection is slower than usual.

✓ In most cases, _the user experience_ might be inferior.

Here, there is no person "present" in the sentence, but the *user experience* (an abstract, technical key word) is in focus.

Same principle in Swedish

? När **man** använder telefonen kan det hända att **man** upptäcker att uppkopplingen inte är så snabb som den borde vara.

✔ I de flesta fall upptäcker <u>användaren / uppringaren</u> att uppkopplingen är långsammare än vanligt.

...männa <u>användarupplevelsen</u> kan påverkas

Concise sentences are often more *precise*!

Here, there is no person "present" in the sentence, but the *user experience* (an abstract, technical key word) is in focus.

Style: use single verbs instead of phrasal verbs

What could be improved in this sentence?

According to some biologists, coming up with clear proof of the decreasing number of frogs has been difficult.

According to some biologists, **offering** clear proof of the decreasing number of frogs has been difficult.

Style: Can you replace the phrasal verb with a more formal synonym in these sentences?

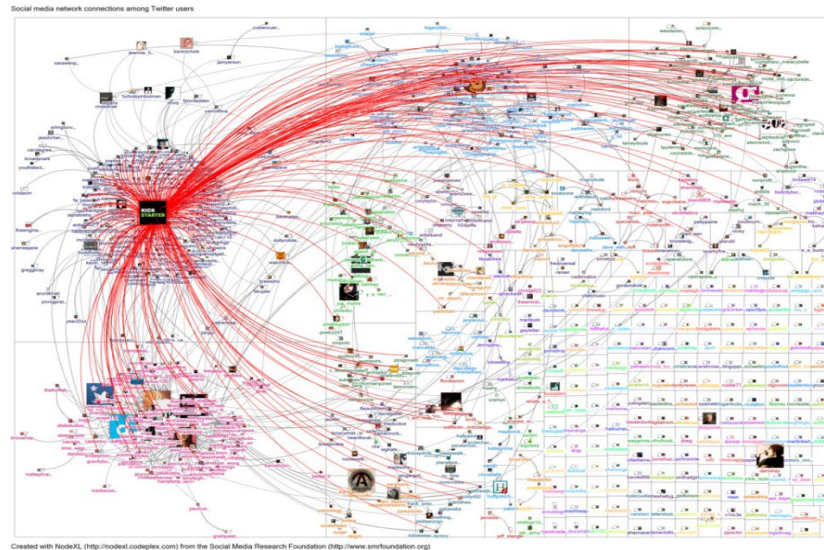Scientists are **investigating** innovative ways to combat AIDS.

The purpose of this paper is to **determine** what is lacking in our current understanding of corrosion.

Rice and aquatic products **constitute** major part of the diet of the people in Vietnam.

Suppliers want to **remove** this time-consuming process

Style/precision: expressing "a lot of"

"This application displays **a lot of** *data"*

A lot of ➡️

Large amounts of data

A great number of projects

A ~~huge~~ amount of
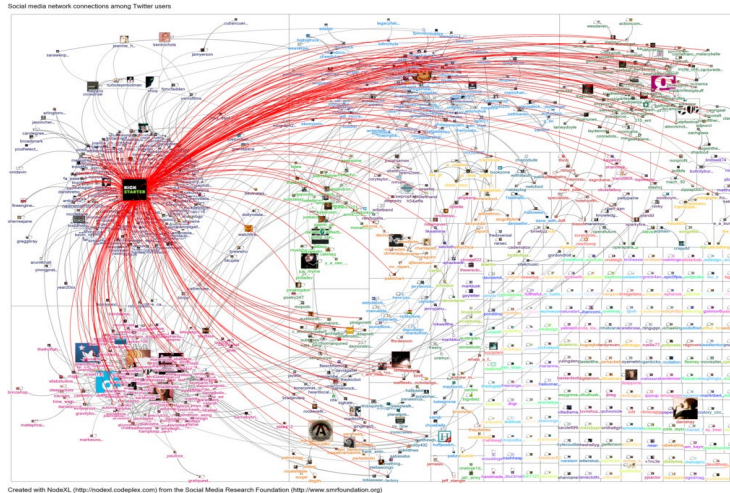
~~Enormous~~ amount of

Several tests
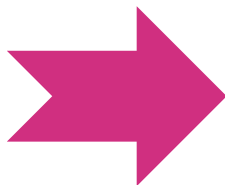
Many studies

~~Many researches~~

Much research

Style/precision:
mycket, massor av, många

"Denna applikation genererar massor av data"

Massor av →

Mycket stora mängder data

~~Väldigt~~ stora mängder data

Fler än 200 körningar

En stor del av den befintliga forskningen

Ett flertal experiment

Style: Avoid contractions

- *don't* → *do not*
- *haven't* → *have not*
- *wasn't* → *was not*
- *it's* → it is

Some common errors – getting it correct

- Subject-verb agreement

- Apostrophes and hyphens

- Numbers in English and Swedish

Flickr.com / creative commons Image by Tim Lumley

Subject-verb agreement

Get the apostrophe right

- *A dataset*
- *Two datasets* (plural form, no apostrophe)

- *The participant's views (= the views of one participant)*
- *The participants' views (= the views of two or more participants)*

- Note! Avoid using genitive plural with inanimate words ending in -s:
  - *To limit the faults' consequences, energy discrimination methods must be implemented.*
  - *To limit **the consequences of the faults**, energy discrimination methods must be implemented.*
  - *Faults' analysis* → *fault analysis (compound noun)*

- *The proposed structure and* __its__ *advantages (it's or its)?*

Hyphens (Sw. *bindestreck*)

Swedish	English
AI-system	AI systems
Nyquist-diagram	Nyquist diagram
IoT-relaterade frågor	IoT-related issues

Get it correct: Writing numerals

135 400,5

135,400.5

Get it correct: quotation marks

” ”
ninety-nine ninety-nine

“ ”
sixty-six ninety-nine

False friends

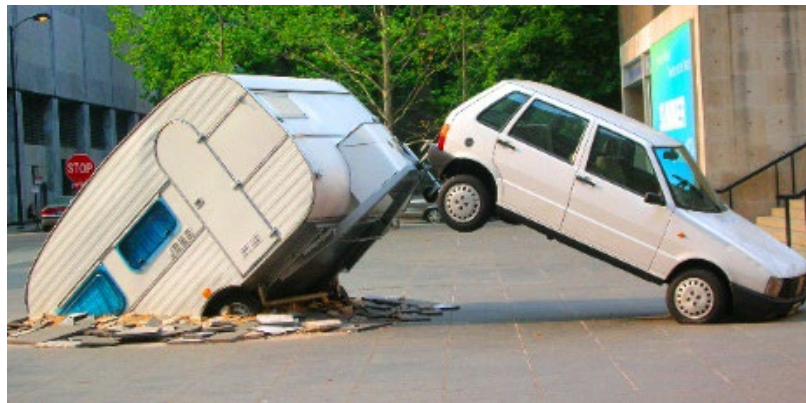| 🇸🇪		🇬🇧
aktuell	~~actual~~	*current, present*
effektiv	(effective)	*efficient*
motivera	(motivate)	*justify*
konsekvent	~~consequent~~	*consistent*
eventuellt	~~eventually~~	*possibly, maybe*

In sum…

Readers want texts that are logical and readable.

Your text needs to be

Concise: Say it in as few words as possible

Precise: Choose words that convey as much information as possible

Correct: Choose the appropriate *style*   Get spelling, punctuation, and grammar right

If you get stuck

- Read someone else's text and review it critically
- Work on a different section – perhaps start drafting the introduction to your popular science summary?
- Write captions, work on your figures and tables
- Ask someone else to read
- Work on the title

Flickr.com. Photo by LaLina

Some dos and don'ts

- Do keep a document open in which you can jot down ideas
- **Do not** save all the writing to the last minute
- Do save lots of time for proofreading and editing
- Do write a little each day and reward yourselves

https://www.narga.net/wp-content/uploads/2014/04/taking-note.jpg

Some useful dictionaries and online resources

- The KTH Guide: **www.kth.se/writingguide**

- Karolinska Institutet (good advice on referencing)
  - **https://kib.ki.se/skriva-referera/skriva-akademiskt**

- The Manchester Phrasebank: **www.phrasebank.manchester.ac.uk**

- The Purdue Online Writing Lab: **https://owl.english.purdue.edu.owl**

- Oxford Dictionaries: **www.oxfordlearnersdictionaries.com**

See you in the seminars!

https://cdn.pixabay.com/photo/2017/02/27/08/28/crocus-2102369_960_720.jpg