## **Good Citation Practice**

#### Introduction

Scoppions are efficient predators that accept variety of prey (Polis & McComnick, 1986. M & Polis, 1990). Most species are noctumal by the use of a sit and wait strategy, wher located in the opening of the scorpion place or just outside it. Only a few spe to actively hunt prey away from the (McCormick & Polis, 1990).

The ecological aspects of prev capt raging in scorpions have been thoroughly investigated by the late Gary Polis and associates (see Polis, 1990 and McCormick & Polis, 1990 for a review). Also, the sensoryphysiological aspects of prey capture are well documented by the studies by Philip Brownell, Douglas Gaffin and others (see reviews in Brownell, 2001 and Gaffin & Brownell, 2001). The behavioral aspects of prey capture have been less documented and most studies have been anecdotal in nature, or just have included brief descriptions of prey capture for different species (see McCormick & Polis, 1990 for a review). One exception is Bub & Bowerman's (1979) study on prev capture in Hadrurus arizonensis Ewing, 1928 (Iuridae). In this study, the different behavioral components involved in the prev capture were identified and discussed. Cushing & Matherne (1980) and Casper (1985) have also provided some quantitative data for some of the behavioral components of the prev capture sequence.

The purpose of this paper is to present a quantitative analysis of the behavior components involved in prey capture in *Parabuthus leiosoma* (Ehrenberg, 1828) and *Parabuthus pallidus* Pocock, 1895 from East Africa.

#### Literature

ALEXANDER, A. J. 1972. Feeding scorpions. South African Journal of 253-256.

BROWNELL, P. H. 1977. Compressional and surface waves in sand used by desert scorpions to locate prey. *Science*, 197: 479-482.

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- POLIS, G. A. & S. J. MCCORMICK. 1986. Patterns of resource use and age structure among species of desert scorpion. *Journal of Animal Ecology*, 55: 59-73.

Senior Research Librarian Jan Ove Rein Senior Research Librarian Sindre A. Pedersen Medicine and Health Library, NTNU November 2019

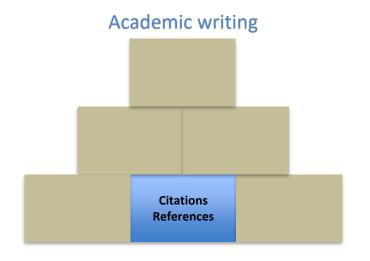


### Good citation practice is a cornerstone in academic writing.

The reference list in your manuscript is important. Both editors, censors and peer reviewers will early pay attention to this.

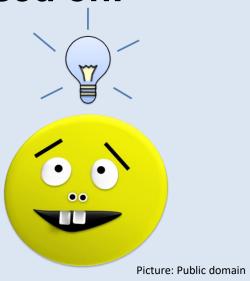
### Why?

- Previous research is often the foundation of your ideas and work.
- Good citation practice shows good scientific behaviour.
- Good citation practice helps your reader understand and investigate your work.
- Good citation practice prevents the dispersion of scientific errors and bad science ("The Whisper Game").





- Academic works are usually based on:
- General/Common Knowledge
- Other's ideas
- My own ideas





### **Plagiarism:**

Used first by the Roman poet Martial (38-104 AD) in frustration over other poets using his work as their own. Latin *plagiarius* means "kidnapper" (someone who ensnares children or slaves in a plaga or net).

"Fame has it that you, Fidentinus, recite my books to the crowd as if none other than your own. If you're willing that they be called mine, I'll send you the poems for free. If you want them to be called yours, buy this one, so that they won't be mine."

### **Plagiarism – Main types:**

- Fraud (intentionally using others work).
- Failure to cite or cite correctly.
- Failure to quote correctly.



Source: Wikimedia Commons



### "The Academic Whisper Game"

- Transferring information from source to source without checking the primary source. → May lead to errors and quite serious consequences.
- Is the cause of several famous academic urban myths.



Photo by Jamin Gray, via flickr. https://www.flickr.com/photos/jamingray/1056525232



effects of envenomation in Iraq. Bouisset and Larrouy (1962) wrote that while Scorpion maurus Linneus, 1758, a species widely distributed in southern Europe, the Middle East and North Africa, caused only "benign" effects by its sting in France, fatalities due to this species had been reported in Algeria. As the species has never been clearly defined, it may be that some of the "subspecies" found in Africa may possess venoms far more potent than that of the S. maurus recognized in Europe. While scorpion sting is not an important medical

Venom poisoning by « Scorpio maurus » and « Buthus occitanus » in the Tlemcen department.

In the course of a survey carried out at the north-western border of Algeria, the authors confirm that venom poisoning by scorpion sting is a frequent accident, but that there may exist areas in which Arthropods are specially poisonous. Venom poisoning by *Buthus occitanus* is most often benign, but there exist severe cases, in which serotherapy and antalgic treatment should be immediately applied. With *Scorpio maurus*, venom poisoning is usually benign. **"The academic whisper game"** The "dangerous" scorpion *Scorpio maurus*.

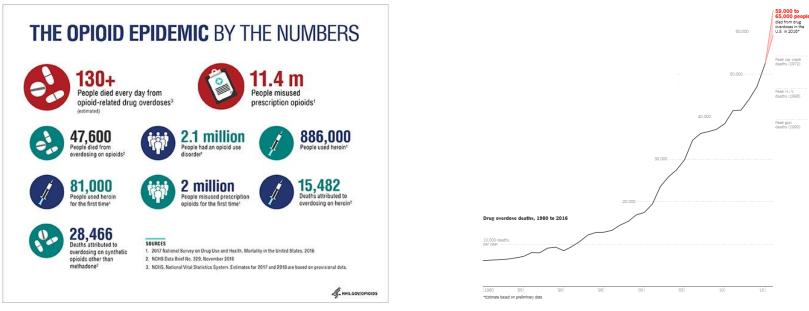
Keegan HL. Scorpions of Medical Importance. London: Fitzgerald; 1998. p. 119

Bouisset L, Larrouy G. Envenimations par Scorpio maurus et Buthus occitanus dans le Departement de Tlemcen. Bull Soc Path Exot. 1962;55:139-46.



### "US Opioid Epidemics"

How bad citation practice contributed to extensive opioid abuse and deaths in USA.



Source: Katz, J. Drug Deaths in America Are Rising Faster Than Ever. New York Times. June 5<sup>th</sup>, 2017.



Source: https://www.hhs.gov/opioids/about-the-epidemic/index.html

Editor's Note (added May 31, 2017): For reasons of public health, readers should be aware that this letter has been "heavily and uncritically cited" as evidence that addiction is rare with opioid therapy. Leung et al. describe its history.

CORRESPONDENCE ARCHIVE

#### Addiction Rare in Patients Treated with Narcotics

#### 371 Citing Articles

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TO THE EDITOR

Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients<sup>1</sup> who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,<sup>2</sup> Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

#### Jane Porter

Hershel Jick, M.D.

Boston Collaborative Drug Surveillance Program Boston University Medical Center, Waltham, MA 02154

2 References 👻 ┥

#### January 10, 1980 N Engl J Med 1980; 302:123 DOI: 10.1056/NEJM198001103020221





Source: Porter, J., Hershel, J. Addiction rare in patients treated with narcotics. N Engl J Med. 1980; 302:123.

### "US Opioid Epidemics"

How bad citation practice contributed to extensive opioid abuse and deaths in USA.



### "US Opioid Epidemics"

How bad citation practice contributed to extensive opioid abuse and deaths in USA.

#### **TIME**

#### Less Pain, More Gain

By SAM ALLIS BOSTON | Sunday, June 24, 2001

medicine, is basically unwarranted. A landmark study published in 1982, followed almost 12,000 Boston hospital patients who had been given narcotic pain-killers. After eliminating those with a history of addiction, researchers found that only four became addicted to the drugs they received as patients. "You don't see cancer patients running around robbing shopping malls to support their habits," notes Carr.

#### Cancer pain relief and palliative care

World Health Organization Technical Report Series 804

(3)

68. PORTER, J. & JICK, H. Addiction rate in patients treated with narcotics. New England journal of medicine, 302: 123 (1980).

World Health Organization, Geneva 1990

SCIENTIFIC AMERICAN February 1990 Volume 262 Number 2

### The Tragedy of Needless Pain

Contrary to popular belief, the author says, morphine taken solely to control pain is not addictive. Yet patients worldwide continue to be undertreated and to suffer unnecessary agony

#### by Ronald Melzack

of addiction. In an extensive study Jane B. Porter and Hershel Jick of the Boston University Medical Center followed up on 11,882 patients who were given narcotics to relieve pain stemming from various medical problems; none of the subjects had a history of drug dependence. The team found that only four of the patients subsequently abused drugs, and in only one case was the abuse considered major.



### "US Opioid Epidemics"

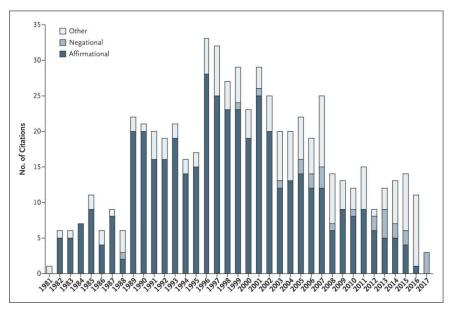
How bad citation practice contributed to extensive opioid abuse and deaths in USA.

Quote	Reference	Quote	Reference
"This pain population with no abuse history is literally at no risk for addiction."	Kowal N. What is the issue?: pseudoaddiction or undertreatment of pain. Nurs Econ 1998;17(6):348–9	"Although medicine generally regards anecdotal information with disdain (rigorously controlled double-blind clinical trials are the "gold standard"), solid data on the low risk of addiction to opioid analgesics and the manageability of adverse side effects have been ignored or discounted in favor of the anecdotal, the	in patient care. Has the time come for a
"In truth, however, the medical evidence overwhelmingly indicates that properly administered opioid therapy rarely if ever results in "accidental addiction" or "opioid abuse"."	Libby RT. Treating Doctors as Drug Dealers: The Drug Enforcement Administration's War on Prescription Painkillers. The Independent Review 2006;10(4):511-545.		
"Fear of addiction may lead to reluctance by the physician to prescribe. []	i allacious.		
However, there is no evidence that this occurs when prescribing opioids for pain."	chronic abdominal pain. Int J Clin Pract 2002;56(3):227–8.	"The Boston Drug Surveillance Program reviewed the charts of nearly 12,000 cancer pain patients treated over a	of cancer pain. Semin Oncol
"In reality, medical opioid addiction is very rare. In Porter and Jick's study on patients treated with narcotics, only four of the 11,882 cases showed psychological	and analysis of oncologists' knowledge of morphine usage in cancer pain treatment. Onco Targets Ther	decade and found only four of them could be labeled as addicts."	
dependency."	2014;7:729–37.		
"Physicians are frequently concerned about the potential for addiction when prescribing opiates; however, there have been studies suggesting that addiction rarely evolves in the setting of painful conditions."	Management in the Emergency		
		Source: Leung PTM, Macdonald EM, Stanbrook MB, Dhalla IA, Juurlink DN. A 1980 Letter on the Risk of Opioid Addiction. N Engl J Med. 2017;376(22):2194-5.	



### "US Opioid Epidemics"

How bad citation practice contributed to extensive opioid abuse and deaths in USA.



In conclusion, we found that a five-sentence letter published in the *Journal* in 1980 was heavily and uncritically cited as evidence that addiction was rare with long-term opioid therapy. We believe that this citation pattern contributed to the North American opioid crisis by helping to shape a narrative that allayed prescribers' concerns about the risk of addiction associated with long-term opioid therapy.

Source: Leung PTM, Macdonald EM, Stanbrook MB, Dhalla IA, Juurlink DN. A 1980 Letter on the Risk of Opioid Addiction. N Engl J Med. 2017;376(22):2194-5.



### General/Common knowledge:

General common knowledge or field-specific common knowledge consist of well-established and reliable facts. **This kind of information needs no citations**.

Example:

The earth is round.



Source: By NASA/Apollo 17 crew; taken by either Harrison Schmitt or Ron Evans [Public domain], via Wikimedia Commons.

NB! If you are in doubt, be cautious and cite the source!



### When and how often should you cite?

### Common knowledge:

## Which of the following statements would be considered common knowledge? Which would need to be cited?

1. The Big Bang theory posits that the universe began billions of years ago with an enormous explosion.

2. The phrase "Big Bang" was coined by Sir Fred Hoyle, an English astronomer. Hoyle used the term to mock the theory, which he disagreed with.

3. According to the Big Bang model, the initial explosion was produced when an infinitely hot, dense center referred to as a singularity, began to expand, giving rise to the particles that eventually formed into our universe.

Source: Academic Integrity at MIT (https://integrity.mit.edu/handbook/citing-your-sources/what-common-knowledge)



Spinach is a major, important source for iron!



CC-BY NC-2 © Lou Gold

### Original text taken from Larsson, 1995, p. 448–449:

"The myth from the 1930s that spinach is a rich source of iron was due to misleading information in the original publication: a malpositioned decimal point gave a 10-fold overestimate of iron content [Hamblin, 1981]".

### My new text:

Growing up with the popular Popeye cartoons, I learned to eat spinach because I would get very strong and healthy due to its high iron content. This has turned out to be a myth caused by a misplaced comma in a research articles in the 1930s giving spinach a much higher iron content than was the case (HOW DO I CITE THIS?).



### Spinach is a major, important source for iron!

#### Original text taken from Larsson, 1995, p. 448–449:

"The myth from the 1930s that spinach is a rich source of iron was due to misleading information in the original publication: a malpositioned decimal point gave a 10-fold overestimate of iron content [Hamblin, 1981]".

My new text – Example 1:

Growing up with the popular Popeye cartoons, I learned to eat spinach because I would get strong and healthy due to its high iron content. This has turned out to be a myth caused by a misplaced comma in a research articles in the 1930s giving spinach a much higher iron content than was the case.



### Spinach is a major, important source for iron!

#### Original text taken from Larsson, 1995, p. 448–449:

"The myth from the 1930s that spinach is a rich source of iron was due to misleading information in the original publication: a malpositioned decimal point gave a 10-fold overestimate of iron content [Hamblin, 1981]".

#### My new text – Example 2:

Growing up with the popular Popeye cartoons, I learned to eat spinach because I would get strong and healthy due to its high iron content. This has turned out to be a myth caused by a misplaced comma in a research articles in the 1930s giving spinach a much higher iron content than was the case **(Larsson, 1995, p. 448-449)**.



### Spinach is a major, important source for iron!

#### Original text taken from Larsson, 1995, p. 448–449:

"The myth from the 1930s that spinach is a rich source of iron was due to misleading information in the original publication: a malpositioned decimal point gave a 10-fold overestimate of iron content [Hamblin, 1981]".

#### My new text – Example 3:

Growing up with the popular Popeye cartoons, I learned to eat spinach because I would get strong and healthy due to its high iron content. This has turned out to be a myth caused by a misplaced comma in a research articles in the 1930s giving spinach a much higher iron content than was the case (Hamblin, 1981, cited in Larsson, 1995, p. 448-449).



### Spinach is a major, important source for iron!

#### Original text taken from Larsson, 1995, p. 448–449:

"The myth from the 1930s that spinach is a rich source of iron was due to misleading information in the original publication: a malpositioned decimal point gave a 10-fold overestimate of iron content [Hamblin, 1981]".

#### My new text – Example 4:

Growing up with the popular Popeye cartoons, I learned to eat spinach because I would get strong and healthy due to its high iron content. This has turned out to be a myth caused by a misplaced comma in a research articles in the 1930s giving spinach a much higher iron content than was the case **(Hamblin, 1981)**. *[Without having read it]* 



### Spinach is a major, important source for iron!

#### Original text taken from Larsson, 1995, p. 448–449:

"The myth from the 1930s that spinach is a rich source of iron was due to misleading information in the original publication: a malpositioned decimal point gave a 10-fold overestimate of iron content [Hamblin, 1981]".

#### My new text – Example 5:

Growing up with the popular Popeye cartoons, I learned to eat spinach because I would get strong and healthy due to its high iron content. This has turned out to be a myth caused by a misplaced comma in a research articles in the 1930s giving spinach a much higher iron content than was the case **(Hamblin, 1981)**.



### Spinach is a major, important source for iron!

My own painstaking analysis of the original Popeye newsprint comic strip cartoons<sup>17</sup> reveals quite clearly that Segar chose spinach as the source of Popeye's power because of its high vitamin A content (see: Fig. 3).



Source: Sutton, 2010 (p. 13).



### **Plagiarism:**

To present other peoples work and/or ideas as your own.

Very serious mistake in research and academic writing. May destroy you career.



(Source: Nina Paley, CC BY-SA 3.0)



## When is it plagiarism?

- ✓ Using text written by others
- ✓ Stealing others theories, methods etc.
   ✓ Using references from others work
   ✓ Self-plagiarism



Source: CC0



## Using others work and citing correctly

1) Direct citation/quote

2) Paraphrasing/indirect quote

3) Summary



## **Direct citation/quote**

- Use this only if the language is especially clear or expressive and/or taken from an expert or authority in the field.
- Don't use quotes too often, only when the wording is especially powerful.
- Excessive use of quotes is considered plagiarism (even though cited correctly).

Source: Academic Integrity at MIT (<u>https://integrity.mit.edu/handbook/academic-writing/avoiding-plagiarism-quoting</u>) [In part]



## **Direct citation/quote**

You must clearly show your reader that you are quoting:

- 1. Name the source in an introductory phrase.
- 2. Provide page number for the quote in the introductory phrase or in the end.
- 3. Use quotation marks around the quote or indent long quotations.
- 4. Be sure that your quote is identical with the original.
- 5. If you modify the quote, you must inform your readers.
- 5. Cite the source correctly in the reference list.

### If you fail to do this correctly, it is plagiarism.

Source: Academic Integrity at MIT (<u>https://integrity.mit.edu/handbook/academic-writing/avoiding-plagiarism-quoting</u>) [In part]



## **Direct citation/quote Example 1 & 2**

America, for example, Ochoa et al (2013: 108) wrote about descriptions of *Chactopsis yanomami* Lourenço et al., 2011: "*The original diagnosis and description of this species are uninformative and do not permit a satisfactory comparison with its congeners*". Outside the South

Source: Kovarik F. Notes on the Genera Buthacus, Compsobuthus, and Lanzatus with Several Synonymies and Corrections of Published Characters (Scorpiones: Buthidae). Euscorpius 2018: 1-12.

Sigmund Freud, in *Moses and Monotheism*, maintains that the effect of a traumatic event does not necessarily appear right after the accident, but may take several weeks or months to manifest. He argues:

It may happen that a man who has experienced some frightful accident-a railway

collision, for instance-leaves the scene of the event apparently uninjured. In the

<sup>1</sup>/<sub>2</sub> inch course of the next few weeks, however, he develops a number of severe psychical

and motor symptoms which can only be traced to his shock, the concussion or

whatever else it was. (Freud, 1990, XIII: 309)

Source: WritingCenter@UTDallas.edu.

Quote is in italics and surrounded by quotation marks. In addition, the source is named and cited properly in the start of the sentence (with page number). Quote (long quote) is placed in an indented paragraph. In addition source is named in the start of the sentence and cited properly in the end of the paragraph.



## **Direct citation/quote – Example 3**

#### Authors' conclusions

The failure of vitamin C supplementation to reduce the incidence of colds in the general population indicates that routine vitamin C supplementation is not justified, yet vitamin C may be useful for people exposed to brief periods of severe physical exercise. Regular supplementation trials have shown that vitamin C reduces the duration of colds, but this was not replicated in the few therapeutic trials that have been carried out. Nevertheless, given the consistent effect of vitamin C on the duration and severity of colds in the regular supplementation studies, and the low cost and safety, it may be worthwhile for common cold patients to test on an individual basis whether therapeutic vitamin C is beneficial for them. Further therapeutic RCTs are warranted.

**Kilde:** Hemila, H. and E. Chalker (2013). "Vitamin C for preventing and treating the common cold." <u>The Cochrane database of systematic reviews(1): Cd000980.</u>

### Example 1:

Many peoples, including myself, take regularly extra Vitamin C as dietary supplement in the belief that this will protect against common cold or contribute to a milder disease course. A meta-analysis has recently revealed that all money spent on Vitamin C tablets have been wasted: The failure of vitamin C supplementation to reduce the incidence of colds in the general population indicates that routine vitamin C supplementation is not justified, yet vitamin C may be useful for people exposed to brief periods of severe physical exercise (Hemilä & Chalker 2013).



## **Direct citation/quote – Example 3**

#### Authors' conclusions

The failure of vitamin C supplementation to reduce the incidence of colds in the general population indicates that routine vitamin C supplementation is not justified, yet vitamin C may be useful for people exposed to brief periods of severe physical exercise. Regular supplementation trials have shown that vitamin C reduces the duration of colds, but this was not replicated in the few therapeutic trials that have been carried out. Nevertheless, given the consistent effect of vitamin C on the duration and severity of colds in the regular supplementation studies, and the low cost and safety, it may be worthwhile for common cold patients to test on an individual basis whether therapeutic vitamin C is beneficial for them. Further therapeutic RCTs are warranted.

### Example 2:

**Kilde:** Hemila, H. and E. Chalker (2013). "Vitamin C for preventing and treating the common cold." <u>The Cochrane database of systematic reviews(1): Cd000980.</u>

Many peoples, including myself, take regularly extra Vitamin C as dietary supplement in the belief that this will protect against common cold or contribute to a milder disease course. Hemilä & Chalker (2013) have published a meta-analysis with a conclusion that reveal that the money spent on Vitamin C tablets may have been wasted: "The failure of vitamin C supplementation to reduce the incidence of colds in the general population indicates that routine vitamin C supplementation is not justified, yet vitamin C may be useful for people exposed to brief periods of severe physical exercise" (p. 2).



### **Direct citation/quote Example 4 & 5**

### Modifying a direct quote:

"Scorpions are notorious for their stinging behaviour and powerful venoms ... As yet, there have been no controlled or quantitative studies of sting use" (Rein, 1993, p. 60) Use ... if you need to omit a word or words from a quote.

"Scorpions are notorious for their stigning [*sic*] behaviour and *powerful* [italics added] venoms ... As yet, there have been no controlled or quantitative studies of sting use" (Rein, 1993, p. 60)

Use [*sic*] if you need to indicate a misspelling or grammatical error or use [] if you need to add a word or words to a quote or need to change the formatting. Words should be added only for explanatory reasons and formatting should only be done to emphasis a word or a phrase.



## Paraphrasing

Taking the words of another source and restating them, using your own vocabulary

You keep the meaning of the original text, but do not copy its exact wording. Some call paraphrasing indirect quoting. In academic writing you will paraphrase more often that you will quote.



## Paraphrasing

### Strategies for paraphrasing:

- ✓ Read the original paragraph thoroughly.
- ✓ Identify main ideas/topics.
- ✓ Rephrase using your own words.
- ✓ Use synonyms for non-generic words.
- ✓ Change the structure of the sentences.
- $\checkmark$  Change voice from active to passive and vice versa.
- The paraphrased text should have the same length as the original or a little shorter.
- Always include a citation to show the source of the paraphrased text (or it will be plagiarism).



## Paraphrasing – Example 1

### Original

A grid cell is a place-modulated neuron whose multiple firing locations define a periodic triangular array covering the entire available surface of an open twodimensional environment. Grid cells are thought to form an essential part of the brain's coordinate system for metric navigation. They have attracted attention because the crystal-like structure underlying their firing fields is not imported from the outside world, but created within the nervous system.

Source: Moser, E. & Moser M. B. (2007), Scholarpedia, 2(7):3394.

### New text 1

According to Moser et al. (2007) a grid cell is a place-modulated neuron whose multiple firing locations define a periodic triangular array covering the entire available surface of an open two-dimensional environment



## **Parafrasering - Example 2**

### Original

#### A grid cell is a place-modulated neuron whose multiple firing locations define a periodic triangular array covering the entire available surface of an open twodimensional environment. Grid cells are thought to form an essential part of the brain's coordinate system for metric navigation. They have attracted attention because the crystal-like structure underlying their firing fields is not imported from the outside world, but created within the nervous system.

Source: Moser, E. & Moser M. B. (2007), Scholarpedia, 2(7):3394.

#### According to Moser et al. (2007) a grid cell is a place-modulated neuron with several firing locations defining a periodic triangular array covering the whole surface of an open two-dimensional environment

New text 2



## **Paraphrasing - Example 3**

### Original

### New text 3

A grid cell is a place-modulated neuron whose multiple firing locations define a periodic triangular array covering the entire available surface of an open twodimensional environment. Grid cells are thought to form an essential part of the brain's coordinate system for metric navigation. They have attracted attention because the crystal-like structure underlying their firing fields is not imported from the outside world, but created within the nervous system.

Source: Moser, E. & Moser M. B. (2007), Scholarpedia, 2(7):3394.

According to Moser et al. (2007), grid cells represent a type of neurons with many responsive locations that together make up a grid of an environment with two dimensions.



## **Paraphrasing - Example 4**

### Original

#### A grid cell is a place-modulated neuron whose multiple firing locations define a periodic triangular array covering the entire available surface of an open twodimensional environment. Grid cells are thought to form an essential part of the brain's coordinate system for metric navigation. They have attracted attention because the crystal-like structure underlying their firing fields is not imported from the outside world, but created within the nervous system.

Source: Moser, E. & Moser M. B. (2007), Scholarpedia, 2(7):3394.

#### Grid cells represent a type of neurons with many responsive locations that together make up a grid of an environment with two dimensions. They are considered a vital component of the coordinate system for navigation. The fascinating crystal-like structures in their firing fields are formed in the nervous system itself (Moser et al. 2007)

New text 4



## Summary

# A synthesis of the main content and ideas of a text, restated in your own words.

### What is the difference between paraphrasing and summarizing?

Summarizing and paraphrasing are somewhat different. A paraphrase is about the same length as the original source, while a summary is much shorter. Nevertheless, when you summarize, you must be careful not to copy the exact wording of the original source. Follow the same rules as you would for paraphrase. Source: Academic Integrity at MIT (https://integrity.mit.edu/handbook/academic-writing/summarizing)



# Summary

### Strategies for writing a summary:

- ✓ Read the paragraph thoroughly.
- ✓ Identify main ideas/topics.
- ✓ Write a paraphrased sentence for each idea/topic.
- ✓ Combine the paraphrased sentences to one sentence.
- $\checkmark\,$  Present the information neutrally.
- The resulting text should be significantly shorter than the original.
- ✓ Always include a citation to show the source of the summarized text (or it will be plagiarism).



# **Summary - Example 1**

### Original

A grid cell is a place-modulated neuron whose multiple firing locations define a periodic triangular array covering the entire available surface of an open twodimensional environment. Grid cells are thought to form an essential part of the brain's coordinate system for metric navigation. They have attracted attention because the crystal-like structure underlying their firing fields is not imported from the outside world, but created within the nervous system.

Source: Moser, E. & Moser M. B. (2007), Scholarpedia, 2(7):3394.

### New text 5

According to Moser et al. (2007), grid cells represent a type of neurons in the brain that allows animals to understand their position in space.



# Why should we cite in academic writing?

Why should I cite my sources – Recap

•To show your readers that you have done your research.

•To give credit to others for work they have done.

•To clearly separate your own contribution from that of others.

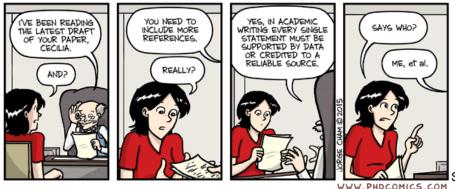
•To point your readers to sources that may be useful to them.

•To allow your readers to check your sources, if there are questions.

Source: Academic Integrity at MIT (https://integrity.mit.edu/handbook/citing-your-sources/avoiding-plagiarism-cite-your-source)



### **Bad citation practice**



### **Forced citations:**

Using a citation/source because someone (a supervisor, co-author, referee) insist.

Source: "Piled Higher and Deeper" by Jorge Cham. www.phdcomics.com

### **Plagiarizing citations:**

Using a citation/source found in other's work without checking the source yourself. "The Academic Whisper Game". NB! Sometimes it is necessary to use secondary citations. More about this later.

### **Superficial citations:**

Using a citation/source without having read it properly and/or understood it properly.

### **Confusing citations:**

Using a citation/source without providing the source properly or with erroneous or missing data.



### **Bad citation practice**

### **Inflated citations:**

Making a citation/source tell more than it actually does (have evidence for).

### **Decorative citations:**

Using a citation/source for the sake of appearances.

### **Misleading citations:**

Using a citation/source as support for your claim while the source actually says something else.

### **Flattering citations:**

Using a citation/source from authors that you want to impress or flatter.

### Self (ego) citations:

Using your own citation/source without any justification.

### **Illusive citations:**

Using several secondary citation/source that all are based on the same primary source.



#### **Citations (In-text citations):**

You show in the body of the text where words, ideas or information came from.

#### **References/Bibliography:**

You provide complete information about the source (author, title, year, name of publication, volume/issue, pages, date etc. at the end of your paper.

#### Style:

Different disciplines use different citation styles, as do various journals within a single discipline. Use a reference management program to assist you when writing.

#### 1 | INTRODUCTION

Rapid warming and ocean acidification are considered two of the most important threats to marine biodiversity in the coming centuries (Maclean & Wilson, 2011). Although the  $CO_2$ -concentration (fCO<sub>2</sub>) and temperature are excited to rise together in the future ocean, most effect studies on climate change have only focused on the isolated effects of changes in these stressors (Kroeker et al., 2013). However, this approach ignores the possibility that simultaneous inclusive temperature and fCO<sub>2</sub> may trigger interactive effects. Multiple stressors

#### REFERENCES

- Båmstedt, U., Nejstgaard, J. C., Solberg, P. T., & Høisœter, T. (1999). Utilisation of small-sized food algae by *Calanus finmarchicus* (Copepoda, Calanoida) and the significance of feeding history. *Sarsia*, 84, 19–38. https://doi.org/10.1080/00364827.1999.10420449
- Beaugrand, G. (2009). Decadal changes in climate and ecosystems in the North Atlantic Ocean and adjacent seas. Deep Sea Research Part II: Topical Studies in Oceanography, 56, 656–673. https://doi. org/10.1016/j.dsr2.2008.12.022
- Beaugrand, G., Brander, K. M., Lindley, J. A., Souissi, S., & Reid, P. C. (2003). Plankton effect on cod recruitment in the North Sea. *Nature*, 426, 661– 664. https://doi.org/10.1038/nature02164

Source: Pedersen SA, Hanssen AE. Ocean acidification ameliorates harmful effects of warming in primary consumer. Ecology and evolution 2018, 8(1):396-404.



How do you get the perfect citations and reference list?

### Get and learn how to use a reference management program!

Students and staff at NTNU has free access to EndNote. The library has EndNote courses and user support for EndNote.





### Author-Date style:

It appears that scorpions with large, powerful pedipalps seldom use the sting, while species with small, slender pedipalps readily sting their prey (Baerg 1961; Stahnke 1966; Mc Cormick and Polis 1990). Casper (1985) proposed an ontogenetic change in sting use by *Pandinus imperator* (C. L. Koch, 1841). Young individuals stung prey readily, while older and adult individuals were never observed to employ the sting. Similar results were observed by Cushing and Matherne (1980) for *Paruroctonus boreus* (Girard, 1854). Le Berre (1979) noted decreased sting use with smaller prey in *Buthus occitanus* (Amoreux, 1789), and similar observations were reported for other species (Pocock 1893; Vachon 1953; Cloudsley-Thompson 1958; Baerg 1961; Bucherl 1971; Polis 1979).

Baerg, W. J. (1961). "Scorpions: Biology and effect of their venom." <u>Bull. Agri. Exper. Station Kansas</u> 649: 1-34.
Bucherl, W. (1971). Classification, biology, and venom extraction of scorpions. <u>Veonomous animals and their venoms. Vol. III: Venomous invertebrates</u>. W. Bucherl and E. E. Buckley. New York, NY, Academic Press: 317-347.
Casper, G. S. (1985). "Prey capture and stinging behavior in the emperor scorpion, Pandinus imperator (Koch) (Scorpiones, Scorpionidae)." J. Arachnol. 13: 277-283.
Cloudsley-Thompson, J. L. (1958). <u>Spiders, Scorpions, Centipedes and Mites</u>. Oxford, Pergamon Press.
Cushing, B. S. and A. Matherne (1980). "Stinger utilization and predation in the scorpion Paruroctonus boreus." <u>Great Basin Nat.</u> 40(2): 193-195.
Le Berre, M. (1979). "Analyse sequentielle du compartement alimentaire du scorpion Buthus occitanus (Amor.) (Arachn. Scorp. Buth)." <u>Biology of Behavior</u> 4: 97-122.



#### Numbered style:

It appears that scorpions with large, powerful pedipalps seldom use the sting, while species with small, slender pedipalps readily sting their prey (1-3). Casper (4) proposed an ontogenetic change in sting use by *Pandinus imperator* (C. L. Koch, 1841). Young individuals stung prey readily, while older and adult individuals were never observed to employ the sting. Similar results were observed by Cushing and Matherne (5) for *Paruroctonus boreus* (Girard, 1854). Le Berre (6) noted decreased sting use with smaller prey in *Buthus occitanus* (Amoreux, 1789), and similar observations were reported for other species (1, 7-11).

 Baerg WJ. Scorpions: Biology and effect of their venom. Bull Agri Exper Station Kansas. 1961;649:1-34.

2. Stahnke HL. Some aspects of scorpion behavior. Bull S Calif Acad Sci. 1966;65(2):65-80.

 Mc Cormick SJ, Polis GA. Prey, Predators and Parasites. In: Polis GA, editor. The Biology of Scorpions. Palo Alto, CA: Standford University Press; 1990. p. 294-320.

 Casper GS. Prey capture and stinging behavior in the emperor scorpion, Pandinus imperator (Koch) (Scorpiones, Scorpionidae). J Arachnol. 1985;13:277-83.

 Cushing BS, Matherne A. Stinger utilization and predation in the scorpion Paruroctonus boreus. Great Basin Nat. 1980;40(2):193-5.

 Le Berre M. Analyse sequentielle du compartement alimentaire du scorpion Buthus occitanus (Amor.) (Arachn. Scorp. Buth). Biology of Behavior. 1979;4:97-122.



### Numbered style with superscript:

It appears that scorpions with large, powerful pedipalps seldom use the sting, while species with small, slender pedipalps readily sting their prey <sup>1-3</sup>. Casper <sup>4</sup> proposed an ontogenetic change in sting use by *Pandinus imperator* (C. L. Koch, 1841). Young individuals stung prey readily, while older and adult individuals were never observed to employ the sting. Similar results were observed by Cushing and Matherne <sup>5</sup> for *Paruroctonus boreus* (Girard, 1854). Le Berre <sup>6</sup> noted decreased sting use with smaller prey in *Buthus occitanus* (Amoreux, 1789), and similar observations were reported for other species <sup>1,7-</sup>

1	Baerg, W. J. Scorpions: Biology and effect of their venom. Bull. Agri. Exper. Station Kansas 649,
	1-34 (1961).
2	Stahnke, H. L. Some aspects of scorpion behavior. Bull. S. Calif. Acad. Sci. 65, 65-80 (1966).
3	Mc Cormick, S. J. & Polis, G. A. in The Biology of Scorpions (ed Gary A. Polis) 294-320
	(Standford University Press, 1990).
4	Casper, G. S. Prey capture and stinging behavior in the emperor scorpion, Pandinus imperator
	(Koch) (Scorpiones, Scorpionidae). J. Arachnol. 13, 277-283 (1985).
5	Cushing, B. S. & Matherne, A. Stinger utilization and predation in the scorpion Paruroctonus
	boreus. Great Basin Nat. 40, 193-195 (1980).
6	Le Berre, M. Analyse sequentielle du compartement alimentaire du scorpion Buthus occitanus
	(Amor.) (Arachn. Scorp. Buth). Biology of Behavior 4, 97-122 (1979).





### How do I decide which style to use?

- If you're going to publish in a journal, you will find information about this in the author instructions. Ask the library for help if you're not sure.
- If you can decide yourself, choose the Vancouver style if you want a numbered style and APA6th if you want an author-date style.



How often is it necessary to cite the same source in the text?

- If you quote, you need to cite each time.
- You do not need to cite the same source several times in a paragraph if you paraphrase or summarize as long as it is clear from the text that the information originate from the same source.
- If you include information from different source between the information from the same source, you need to cite again.
- When in doubt, always use a citation to avoid plagiarism.



Frogs are excellent indicator species to measure wetland health. They are very sensitive to changes in pH caused by acid rain, and they are also very sensitive to different types of pollution. When frog populations in a wetland plummet, one can be sure that something is going wrong in the wetland. In addition, when oddities in frog morphology appear, like frogs with five legs or two heads, one can also assume something is going wrong in the wetland environment (Willemssen, 2010).



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Frogs are excellent indicator species to measure wetland health. According to a recent study by Willemssen (2010), frogs are very sensitive to changes in pH caused by acid rain, and they are also very sensitive to different types of pollution. The study notes that when frog populations in a wetland plummet, one can be sure that something is going wrong in the wetland. In addition, when oddities in frog morphology appear, like frogs with five legs or two heads, one can also assume something is going wrong in the wetland environment (Willemssen, 2010).



Frogs are excellent indicator species to measure wetland health. Willemssen (2010) relates research conducted recently in Wisconsin that shows that frogs are very sensitive to changes in pH caused by acid rain, and they are also very sensitive to different types of pollution. Her research indicates that when frog populations in a wetland plummet, one can be sure that something is going wrong in the wetland. In addition, she finishes by noting that when oddities in frog morphology appear, like frogs with five legs or two heads, one can also assume something is going wrong in the wetland environment.



Frogs are excellent indicator species to measure wetland health. Willemssen (2010) recently conducted research in Wisconsin that shows that frogs are very sensitive to changes in pH caused by acid rain, and they are also very sensitive to different types of pollution. Willemssen's research indicates that when frog populations in a wetland plummet, one can be sure that something is going wrong in the wetland. One very telling quote from Willemssen's research is that "87% of wetlands where two-headed frogs are found have high levels of environmental contamination" (p. 341).

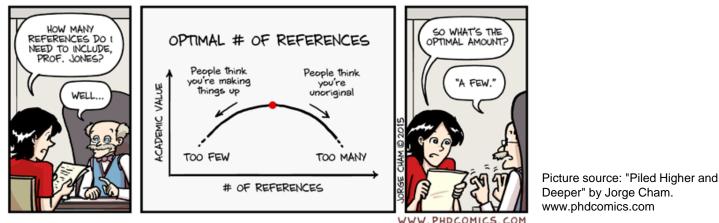


Evolutionary psychology posits that humans have developed specific psychological mechanisms to discriminate those individuals capable of fulfilling their reproductive goals from those less capable of fulfilling reproductive goals (Cosmides & Tooby, 1992). Individuals who possess and act on these preferences are more evolutionarily successful than those who do not. One characteristic critical for successful mating is the health of the potential mating partner. Health is associated with an individual's well-being (Shackelford & Larsen, 1999), longevity (Henderson & Anglin, 2003), ability to nurture and invest in offspring (Cunningham, 1986; Thornhill & Gangestad, 1983), and psychological health (Shackelford & Larson, 1997). The importance of health to mate selection is evident in men's and women's preferences. For instance, in 37 different cultures, both men and women judged good health to be indispensable in a marriage partner (Buss et al., 1990).

Empirical and cross-cultural research indicates that several body parts are especially important to predicting health. In a series of landmark ethnographic surveys designed to understand human sexual behavior, Ford and Beach (1951) argued that despite varying manifestations and expressions of different body parts across cultures, humans from around the world have expressed a preference for healthy-looking eyes, lips, skin, and complexion. They argue further that those body parts are highly desired because of their ability to predict an individual's health. They found that in every culture, clear eyes, full lips, and a clear complexion were highly desirable; and in no culture, did they find that bloodshot or yellow eyes, chapped or scarred lips, or heavily-blemished skin were desirable.

Source: Montoya RM. Gender similarities and differences in preferences for specific body parts. Current Research in Social Psychology. 2007 Dec 26;13(11):133-44 + https://youtu.be/IJcPqtHt8lk





Deeper" by Jorge Cham. www.phdcomics.com

#### How many sources should you cite in one citation?

Cite maximum three sources. If many primary sources can be used, it may be better to cite a review, if available. If not, cite the sources you that you think have the best quality. **NB!** This doesn't apply for review articles where one of the goals is to present all relevant literature within the topic.



Cite maximum three sources. If many primary sources can be used, it may be better to cite a review, if available. If not, cite the sources you that you think have the best quality.

The ecological aspects of prey capture and foraging in scorpions have been thoroughly investigated by the late Gary Polis and associates (see Polis, 1990 and McCormick & Polis, 1990 for a review). Also, the sensoryphysiological aspects of prey capture are well documented by the studies by Philip Brownell, Douglas Gaffin and others (see reviews in Brownell, 2001 and Gaffin & Brownell, 2001). The behavioral aspects of prey cap-

Exception: Reviews where you want to provide a complete account of studies on a given topic

Source: Rein JO. Prey capture behaviour in the East African scorpions Parabuthus leiosoma (Ehrenberg, 1828) and P. pallidus Pocock, 1895 (Scorpiones: Buthidae). Euscorpius. 2003(6):1-8.



### Using secondary citations (citation within citation)

- Citing a source without having read it is dangerous ("The academic whisper game") and a form of plagiarism (using another's citations without checking it yourself).
- Occasionally, a source may be inaccessible or impossible to track down (e.g. it is very old, out of print etc.) – in such cases it may be OK to cite the source as a secondary citation.
- By using a secondary citation you are honest to your readers and tell them that you haven't read the original source yourself and that you are thrusting that your source have cited the original source correctly.
- Only use secondary citations as a last resort and use them rarely.
- Try to minimize the risk of using incorrect information by checking if there are other publications citing the original source in the same way as you have (but others may not have checked the original source either – "The Whisper Game").



Using secondary citations (citation within citation)

### **Our text:**

Small insects that could be controlled by the pedipalps and eaten alive would not be stung by the scorpion to avoid wasting venom (Pocock, 1893, cited in Rein, 1993, p. 60).

Pocock, R. I. (1893). Notes on the habits ne living scorpions. *Nature, 1. June,* 104-107.

Rein, J. O. (1993). Sting use in two species of Parabuthus scorpions (Buthidae). *Journal of* Arachnology, 21, 60-63.

You should only cite the article you have read!



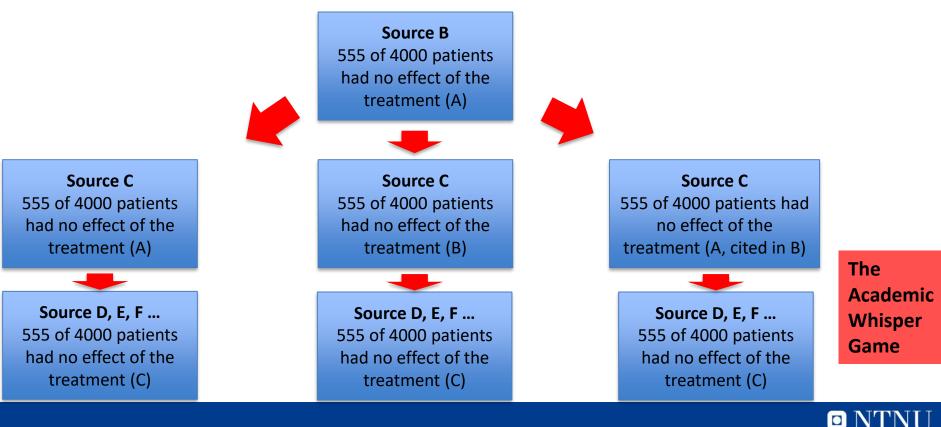
Using secondary citations (citation within citation)



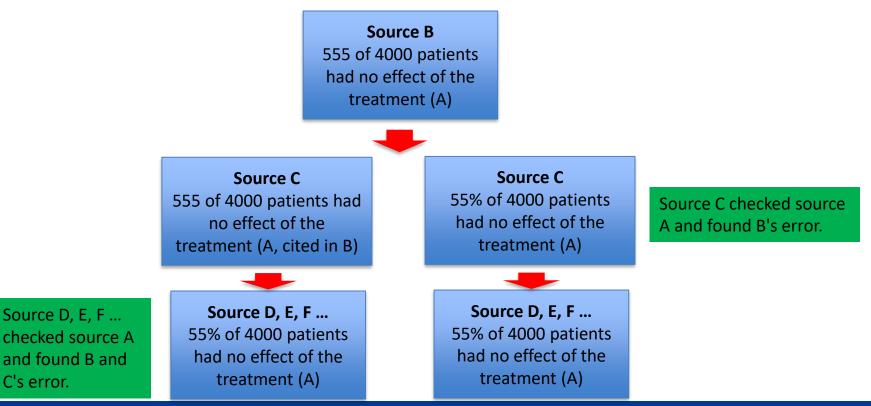
The start of the academic whisper game



### Using secondary citations (citation within citation)



Using secondary citations (citation within citation)





#### Using page numbers in citations

Small insects that could be controlled by the pedipalps and eaten alive would not be stung by the scorpion to avoid wasting venom (Pocock, 1893, p. 105).

- Using page numbers in all citations are common in some disciplinaries, but not in medicine and natural sciences.
- Use page number when citing a quote, or discussing a special figure, table etc. in a manuscript, but not for normal citations for paraphrases and summaries.
- Some authors argue that page numbers are necessary so that the readers can find the relevant information in the source quickly. Why is this not common in medicine? What do you think about using page numbers in citations?



### Finally, Don't do this .....;)



2+ Follow

Not sure how this made it through proofreading, peer review, and copyediting. Via onlinelibrary.wiley.com/doi/10.1111/et ... #addedvalue

Although association preferences documented in our study theoretically could be a consequence of either mating or shoaling preferences in the different female groups investigated (should we cite the crappy Gabor paper here?), shoaling preferences are unlikely drivers of the documented patterns both because of evidence from previous research and inconsistencies with *a priori* predictions. Our methods closely followed those of published mate choice experiments in this system (Tobler et al. 2009a,b; Plath et al. 2013),





### **Recommended reading**

Brennecke, P. Academic Integrity at MIT. Cambridge, MA: MIT Office of the Vice Chancellor. 2018. Available from: <u>https://integrity.mit.edu/sites/default/files/documents/AcademicIntegrityHandbook2018-color.pdf</u> [Cited: 18.10.18].

Bårnes, V. & Løkse, M. Informasjonskompetanse. Håndbok i kildebruk og referanseteknikker. Oslo: Cappelen Damm. 2. ed. 2016.

Engber, D. Bad Footnotes can be Deadly. Slate. June 11<sup>th</sup> 2017. Available from: <u>https://slate.com/technology/2017/06/how-bad-footnotes-helped-cause-the-opioid-crisis.html</u> [Cited: 13.09.19].

Erikson, M. G. Good Citation Practice [In Norwegian]. Oslo: Gyldendal. 2010.

Hamblin T. J. Fake. Br Med J (Clin Res Ed). 1981;283(6307):1671-4.

Larsson K. S. The dissemination of false data through inadequate citation. 1995. J Int Med. 1995;238(5):445–50.



### **Recommended reading**

Leung P. T. M., Macdonald E. M., Stanbrook M. B., Dhalla I. A., Juurlink D. N. A 1980 Letter on the Risk of Opioid Addiction. N Engl J Med. 2017;376(22):2194-5.

PhD on Track – Referencing. 2019. Available from: <u>https://www.phdontrack.net/search-and-review/writing/#Referencing</u> [Cited: 23.09.19].

Rekdal, O. B. Academic urban legends. Social Studies of Science 2014;44(4):638–54.

Rekdal, O. B. – How to Cite [In Norwegian]. Available from: <u>https://blogg.hvl.no/kildebruk/</u> [Cited: 13.02.19].

Sutton M. Spinach, Iron and Popeye: Ironic lessons from biochemistry and history on the importance of healthy eating, healthy skepticism and adequate citation. Internet J Criminology. 2010;Mar:1-34.

