Appendix 2: Reporting Verbs

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A number of options are available to the writer in terms of both (1) the form of the reference to previous work by other authors as well as (2) its position within the sentence.

1. FORM OF CITATION

Three different styles are commonly used in science and engineering: *author-date, bracketed number, superscripted number,* and *parenthetic numbers*. The type used depends on the field of study, publication, or simply the personal preferences of your professor.

	Author-prominent	**Information**-prominent
Author-date	**Smith (2012**) showed that... It was shown **by Smith (2012)** that … **Several recent studies (Smith, 2012; Virtanen et al., 2005; Chao and Wang, 2011)** have suggested that...	**The theory** was first proposed for linear systems **(Smith, 1987)**.
bracketed number	**Smith [2]** showed that... **In [2],** it was shown that… **Several recent studies [1], [3], [4], [15], [16]** have suggested that...	**The theory** was first proposed for linear systems **[1]**.
superscript number	**Smith**[2] showed that... It was shown **by Smith**[2] that … **Several recent studies**[1,3,4,15,16] have suggested that...	**The theory** was first proposed for linear systems.[1]
parenthetic number	**Smith (2)** showed that… It was shown **by Smith (2)** that … **Several recent studies (1), (3), (4), (15), (16)** have suggested that...	**The theory** was first proposed for linear systems **(1)**.

Table 1: The four most common citation styles used in engineering.

The form of citation can be either **"author-prominent"** or **"information-prominent"**, as shown in Table 1. An author-prominent citation is one in which the name of the researcher/source occurs in the actual citing sentence as a grammatical element of the sentence, such as the sentence **subject**; in contrast, information-prominent citations either place the researcher's name in **parenthesis** (*sulkeet*) or use a **superscript number** (*viitenumero*) to refer to the source of the information.

1.1 AUTHOR-PROMINENT CITATION

If the source (e.g., *researcher's name*) is used in the wording of the sentence, as a grammatical element, place the citation immediately, or at least as close as possible, after the first mention of the source.

> **Smith and Virtanen (2002) proposed** a strategy for location management that…
>
> The method **proposed by Smith and Virtanen [6]** is based on a profile similar to that used in our scheme.
>
> We compare the cost of our scheme with **that of Smith and Virtanen (2002).**

Use **"according to"** only for information disseminated by **organizations** or **standards**:

> ~~**According to Smith (2014),** these methods are often accompanied by a certain degree of biopolymer degradation.~~
>
> **According to the IEEE 802.11 standard,** the length of an MSDU must be equal to 2304 octets.

For research and textbooks that have real authors, use instead either a **reporting verb** or **information-prominent** citation strategies (i.e., cite the source using the author's name at the end of the sentence before the final punctuation).

> **Smith (2014) reports that** these methods are often accompanied by a certain degree of biopolymer degradation.
>
> **It has been reported that** these methods are often accompanied by a certain degree of biopolymer degradation **(Smith, 2014)**.
>
> These methods **has been reported to be** often accompanied by a certain degree of biopolymer degradation **(Smith, 2014)**.

Source Inside Text

Use parenthetical citations for directing your reader to specific parts of your text, including tables, figures, charts or graphs, as well as specific sections within the text. Note how this parenthetical information always comes BEFORE final punctuation, such as **commas (,)**, **periods (.)**, and **semicolons (;).**

> A **UNITS network** is typically divided into an access network and a core network **(Fig. 1)**.
>
> In the **hidden node scenario (Section 3.4),** node A transmits a traffic stream to node B.

1.2 INFORMATION-PROMINENT CITATION

In information-prominent citations, the researcher and year of publication do not form a grammatical part of the sentence. Instead, this information is either explicitly mentioned in **parenthesis** (*sulkeet*) or simply referred to by a **superscript number** (*viitenumero*). Such citations are commonly referred to as **parenthetical citations**.

Finnish citation conventions differ from those in the English-speaking world. In the Finnish tradition, citations placed <u>**after** final punctuation</u> at the end of a paragraph indicates that all of the information in that paragraph is from that one source. Otherwise, any citations occurring before final punctuation refer only to that one particular sentence.

🇫🇮	**Refers to whole paragraph** (citation <u>after</u> final punctuation) …thereby obviating the need for expensive distillation.[3] **Refers to only that sentence** (citation <u>before</u> final punctuation) …thereby obviating the need for expensive distillation[3].

In contrast, the convention for English is to always place parenthetical citations **before final punctuation**, such as **commas** (**,**), **periods** (**.**), and **semicolons** (**;**). Note that the only exception to this rule is **long quotations**.

🇬🇧 🇺🇸	The software product-line concept supports reuse by developing a suite of products sharing core commonalities **(Virtanen, 2002)**. By reducing the scope of the analysis to single steps, these techniques can attain great precision and good analysis capabilities**,** **as reported in a variety of studies (e.g., Mattila et al., 2002; Yang and Liu, 2004; Gonzales, 1999)**. Over the last few years, <u>many routing protocols</u> for mobile ad hoc networks **have been proposed [1], [6], [7]**.

Short Quotations

If you want to incorporate into your text a direct quote from another writer's words, always use **quotation marks** (" "). If your quote is short no more than two lines of text, always place your parenthetical citation **BEFORE final punctuation** and <u>not</u> before the quotation mark.

Our approach makes progress towards mechanizing Smith's vision of developing *"a program and its proof hand-in-hand, with the proof ideas leading the way*.*"* **(Smith, 1991)**

Our approach makes progress towards mechanizing Smith's vision of developing *"a program and its proof hand-in-hand, with the proof ideas leading the way* **(Smith, 1991)**.*"*

Our approach makes progress towards mechanizing Smith's vision of developing *"a program and its proof hand-in-hand, with the proof ideas leading the way"* **(Smith, 1991)**.

Long Quotations

If your quote is more than two or three lines, set it off from the rest of the text in your paper by beginning a new line, indenting (10 spaces or 2 tabs), and typing it **<u>without</u> quotation marks** (" "). In this case, place the parenthetical citation **<u>AFTER</u> the period (.) that ends the quotation**. Notice how a **colon (:)** has been used at the end of the sentence that begins the long quote!

It is recognized that the activity of programming not only concerns the satisfaction of goals but also requires the management of interactions between the achievement of several goals**:**

> *"Often the specification of a program will require the simultaneous satisfaction of more than one goal. ..., the special interest of this problem lies in the interrelatedness of the goals*.*"* **Smith and Virtanen (2001, Chapter 3)**

2 REPORTING STRUCTURES

There are two basic types of reported clause: those that begin with **_"that"_ clauses** or **_"to"-infinitive_ clauses**. Reporting structures consist of two parts: a **reporting clause** which contains the reporting verb and a **reported clause** which carries the information or claim to be reported *"the moon is made of cheese"*.

REPORT<u>ING</u> CLAUSE	REPORT<u>ED</u> CLAUSE
Smith (2005) reported	**that** the moon is primarily composed of cheese.
It has been reported	**that** the moon is primarily composed of cheese **[9]**.
The moon has been reported	**to be** primarily composed of cheese **(Smith, 2005)**.

"that" clauses and *"to" infinitive* clauses

Although often called a **_"that"_ clause**, this type of reported clauses may in informal usage occur without *"that"*. Here is a list of verbs which are typically used as reporting verbs with *"that"* clauses:

accept	***claim**	***discover**	hypothesize	***perceive**	***see**
acknowledge	comment	dispute	imply	point out	speculate
add	concede	document	indicate	predict	state
admit	conclude	doubt	infer	presume	tress
agree	confirm	emphasize	inform	propose	suggest
allege	conjecture	establish	insist	***prove**	suppose
anticipate	***consider**	***estimate**	judge	recognize	surmise
argue	contend	***expect**	***know**	recommend	***suspect**
assert	***decide**	***feel**	maintain	***report**	tell
*assume	demonstrate	***find**	mention	reveal	***think**
*believe	deny	hold	note	***show**	***understand**
*calculate	determine	***hope**	***observe**	say	

*verbs, such as **"find"** and **"know"**, which can also be used with a *"to"-infinitive clause*.

The verbs that can form *"to" infinitive* **clauses** refer to mental processes or discovery. The **_"to"_ infinitive** that follows them is most commonly **"be"** or **"have"**, though with some verbs (e.g. *report*, *find* or a perfect infinitive [= *"to have done"*]) can be followed by other verbs other than "to be" or "to have".

> This peak **is believed to be** the cis isomer of coumaric acid.[2,3]
>
> Seyval grapes **were found to have** one of the highest trans-caffeoyl tartrate contents (Lee and Jaworski 2001).
>
> Fatty acids **have been reported to influence** the growth of rumen bacteria (Henderson 2003)

In each of the three examples above the original author is cited using an information-prominent citation form. However, if the **author's name** or other words referring to

researchers or **their research** are used, then the subject of the reported clause must be placed between the reporting clause and the **"to" infinitive**.

> **Other researchers have believed** this peak **to be** the cis isomer of coumaric acid.[2,3]
>
> **Lee and Jaworski (2001) found** seyval grapes **to have** one of the highest trans-caffeoyl tartrate contents.
>
> **NOTE:**
>
> 🙁 **Henderson (2003) has reported** fatty acids ~~to influence~~ the growth of bacteria.
>
> 🙂 **Henderson (2003) has reported that** fatty acids **may influence** the growth of bacteria.

Passives of reporting verbs

If you want to say what has been *claimed*, *thought*, or *discovered* either by previous researchers or in your own study, you can use 'it' as the impersonal **subject** of the **passive form** of a reporting verb, followed by a **"that" clause**. This form is most common in information-prominent citations.

> **It has been suggested that** the ratio SS/TA indicates ripeness of fresh fruit (Deshpande and Salunkhe, 1984).
>
> **It was felt that** this concern could be answered by stabilizing furazolidone through inactivation of the enzymes involved.
>
> **It was found that** no cases of hypothermia had been recorded.

Here is a list of reporting verbs which can be used in the **passive** with **"it"** as their subject:

accept	comment	emphasize	**know**	say
acknowledge	concede	establish	note	**show**
admit	conclude	estimate	**observe**	**speculate**
agree	confirm	expect	postulate	state
allege	conjecture	feel	predict	**suggest**
anticipate	consider	**find**	presume	suppose
argue	decide	hold	propose	surmise
assert	**demonstrate**	hope	**recognize**	suspect
assume	determine	**hypothesize**	recommend	**think**
believe	discover	imply	record	understand
claim	document	indicate	**report**	

The major advantage of using a passive structure with **"it"** is that it allows you to avoid having a long or **"top-heavy" subject**, and thus also allows you to put what you are talking about in a more prominent position at the end of the sentence.