

Writer's intention behind the citation forms in academic texts.

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Academic discourse has become understood as one type of interaction between writer and readers in the discourse community; with linguistic forms analysed to reveal interaction in written discourse. From this perspective the purpose of citation forms has drawn relatively little attention. Moreover, although types of citation forms have been described in relation to verb tense and mood, few studies explained strategic use of citation forms for the construction of argument.

This study therefore intends to examine writers' perspectives upon the purpose of citation forms in scientific and engineering research articles through a combination of text analysis (18 research articles) and interviews with the authors (12 British academics). Most of the authors (11 out of 12) recognised the purposes of citation forms in research articles, they could be categorised as three: function, form and socially oriented purposes. The findings also showed that these three are highly related to each other; interviews revealed the close link among them and the contextual clues embedded in the texts.

1. INTRODUCTION

It is generally agreed that writers do not simply present neutral facts but try to project their own perspective to their readers, thus raising interests in the way that writers present with their propositional content their feelings and evaluations (Conrad and Biber 2003; Hunston 1994; Hunston and Thompson, 2003; Thompson 1996). In academic discourse, writers use various sources to reflect their viewpoint and persuade readers. One of them is citation (Thompson 2006); citations have been examined mainly with reference to reporting verbs (Hunston, 1993; Hyland 1999, 2001; Shaw 1992; Thomas and Hawes, 1994, 1997; Thompson and Ye 1991; Thompson 2001). Thompson and Ye (1991) studied the introduction sections of more than 100 papers to examine how writers show their evaluation of previous work and interact with a discourse community through the reporting verb. Reporting verbs show both positive and negative aspects of evaluation of previous studies. Positive evaluation can be relatively straightforward, while negative one would be more subtle and dissembled in a context (Thompson and Ye, 1991: 374). In other words, analysis of negative evaluation requires insiders' background knowledge.

Citation forms have also been examined (Charles 2006; Hyland 1999) based on the Swales' two

categories of citation forms; one is referred to “*integral*” for the citation outside brackets and the other “*non-integral*” for those inside the brackets (Swales, 1990). The proportional use of the two categories was examined across the disciplines. For example, it was found that social science disciplines such as politics use more integral citation forms than in natural science (Charles 2006). However, as practitioners of the disciplines were not involved in the analysis, purposes of citation forms in a given context were not examined in detail. Thus citation forms were shown but their purposes were rarely presented in textbooks on academic discourse (Davies and Hedge, 1992; Swales and Feak, 1994, 2004).

Davies and Hedge (1992) were among the few who distinguish the two types of citation forms in terms of focus/emphasis. According to their work, to emphasise the author, the writer uses the integral form, and to focus on the research itself, uses the non-integral. However, questions remain as to how these two types were employed in a given context by the writer?

Scholars’ evaluation of previous work has also been conducted in Citation Analysis. It was interesting that although both studies in applied linguistics and citation analysis were interested in how cited work is evaluated by citers, different approaches were taken to reveal use of citation in academic texts.

As shown above, applied linguists tried to compare and contrast disciplinary variety of citation use. Dividing citation forms into two syntactic patterns can achieve this purpose but it does not reveal complex insiders’ perspective on the purpose of citation forms.

By contrast, Citation Analysts have examined citations through the use of expert knowledge (Cozzens 1985; Small 1982; White & Wang 1997). Thus their advantages were to be able to identify their discipline specific use, only obvious to knowledge experts in the discipline. However, it was difficult to form a consensus about the findings across the discipline. It seems necessary to integrate the findings of Citation Analysis with those on the analysis of academic texts (Swales 1986; Howard 2004).

The field of Citation Analysis identifies three major stages in its development of analysis of citation in academic texts (Liu, 1993; Howard, 2004). When the pioneering information scientist, Garfield launched the idea of citation indexing (1955), the main concern was the role of cited work, based on the assumption that the more citations, the more impact it has on the academic community (Cole & Cole, 1971; Merton, 1973; Cole, 2001). However, it was criticised that roles of cited work in cited texts need to be considered, thus leading to the stage of content analysis of cited work (Duncan et al., 1981; Moravcsik & Murugesan, 1975). Various categories such as perfunctory citation and developmental citation were created for classifying cited work (Chubin & Moitra 1975; Moravcsik & Murugesan 1975).

Again limitations arise against the content analysis. One was the difficulty of identifying the writer's intention behind the citation. MacRoberts and MacRoberts (1984) argued that criticism of previous studies can be much higher than appeared in the paper because writers may dissemble the criticism. They were the first to point out the use of perfunctory citation (citation in brackets) for a strategic purpose: to criticise other researchers' work by putting minimal emphasis on their names (MacRoberts and MacRoberts,1987). Citation forms seem to reflect writer's awareness of potential confrontation with the cited authors. Their study shows that citation forms can be one manifestation of human interaction in a discourse community when researchers are making a new knowledge claim.

Another was the applicability of the same categories across the disciplines. When Swales (1986) tried to apply those of Moravcsik & Murugesan (1975) to academic texts in general, he had to drop some of the categories.

Thus interests were shifted to analysis of citer motivation. Two types of motivation were put forward: persuasion and acknowledgement (reward). Gilbert (1977) argued strongly that writers cite to persuade readers as opposed to acknowledgement (reward) of previous work Merton and Garfield expected as the major purpose of citation. Based on their findings of text analysis, Applied linguists would certainly agree with Gilbert (1977). However, Gilbert's rather extreme view that authorial works were cited because their standing in the discourse community also raised some questions. Through interviewing writers of academic texts, researchers have come to understand that it involves both elements of persuasion and acknowledgement (Brooks 1986) but possibly "rhetoric first, reward second" (Cozzens 1989).

Previously in Citation Analysis, citation forms have never been examined as a tool for persuasion. It seems interesting to examine how subject specialists actually employ a syntactic variation to persuade readers in academic texts. This study can help to integrate citation analysis to applied linguistic.

2. RESEARCH QUESTIONS

Three research questions were asked in order to integrate insiders' perspectives into text analysis for the analysis of citation forms. Scientific and engineering disciplines were chosen instead of texts with direct quotations in which citation forms need to be divided into three.

Q.1. Whether writers are conscious of the purpose of the two citation forms?

Q.2. If the writer is conscious of any purposes, what would they be?

Q.3. How do these functions affect the frequency of the use of the citation forms?

Questions 1 and 2 were asked in interviews with researchers with the use of the following interview

questions:

1. Are there any differences in general function of these two citation forms?
2. What are their functions?

When interviewees have negative citation, questions were asked by referring to one or more particular citations in their work).

Question 3 was examined through text analysis of the interviewees' research articles.

3. DATA COLLECTION

3.1. Procedure.

3.1.1. Interviews (12 researchers)

At Newcastle University, I interviewed 12 researchers in scientific and engineering departments (see 3.2. for details). Interviews lasted 60 to 90 minutes and took place in each interviewee's office or mine. I recorded and then transcribed their interviews.

3.1.2. Text analysis (18 papers)

Six researchers each provided copies of two different research articles they had written and six provided one. These 18 research articles were all experimental work. As citation may play different roles of other types of articles, review articles and short communications in one or two pages were excluded.

Since in research articles the abstract and method sections have few citations, this analysis focused on the introduction, results and discussion with the focus on the integrated citation form.

3.2. Interviewees

Academic position	field
2 professors	microbiology
1 professor, 1 researcher	civil engineering
1 professor	physiology
1 senior lecturer	soil science
2 professors	chemistry
1 professor, 1 senior researcher and 2 senior lecturers	biology

Of the 12, 11 researchers (senior lecturers, a senior researcher and professors) had experience of being reviewers and most had served on the editorial board of some international journal.

4. RESULTS AND DISCUSSION

4.1. Awareness of purposes of citation forms.

For the awareness of purposes of citation forms, three groups of researchers became evident. One group (Group 1, N=5) could immediately specify a purpose of the integrated citation form; another group (Group 2, N=6) were not aware until after they had re-read the article during the

interview, what were the purposes. One interviewee (Group 3) denied any specific purpose for citation forms.

Researchers in the first group (Group 1) showed their quite clear awareness of the purpose of citation forms as shown below.

Example 1 (Group 1):

A senior lecturer in plant biology:

In order to vary..(variation) yes if we start every sentence by saying X and Y found this you know A and B found that..it's a very bad style.. it makes difficult.. having citation in brackets um takes the citation out of the flow of the sentence so if you like we then can construct a sentence in the best way to make the point but the citation was still there..whereas if we actually write A and B reported so and so.. it imposes a certain structure on a sentence.. ok .. however what we can then do is use that to to if we actually include the names in the sentence structure it then gives more prominence to it so it achieves more emphasis so it's all part of maintaining flow, achieving emphasis, making sure that the style is not boring...and so on...those are my reasons..

Researchers in the second group (Group 2), unaware of the purpose of the citation forms when questioned. They seem to have internalised their purposes so their choice of citation forms seems to have been subconscious.

The following example explains how one researcher came to acknowledge the purpose of the integrated citation form.

At the beginning the researcher denied any purposes of the integrated citation form but after reading his article, he started identifying some patterns of the use as shown in Example 2.

Example 2 (Group 2):

Interviewer: if I ask why did you use this form..

Interviewee (a senior lecturer in soil science):

I couldn't tell you I couldn't tell you..why I did it that way.. I just wrote it that way...I didn't make a conscious decision.. it may be something unconscious that makes me doing but I'm not making a conscious decision...sometimes there may sometimes be a pattern for example if you make a general point such and such is a well-established piece of scientific information and and in order to justify that it's well established you may give a number of references and you would do it like this here such and such have been studied by several investigators da da da da.....you may you may want to go on in the next paragraph to explain what each of these people said if you are going to do that you would then say Cole et al. (1953) discovered blah blah blah...so if you are making a general statement you would certainly you would certainly just put a list of references in a bracket to substantiate your your general statement if you wish to talk about individuals then obviously you will talk about..um by introducing the sentence.. you are you are forcing me to think of what the rules are I don't think of them as rules but you are right there

is a pattern..in a way when you are talking about a single piece of work you will probably start in this [integrated citation] way..

Although one researcher in the third group denied any differences in the purposes of the two citation forms, most of the researchers were aware of the difference in the two types of citation forms.

3.2. Purposes of the citation forms.

Four categories emerged in the interviews with the 11 researchers who indicated that citation forms have different purposes.

There was no clear match between whether researchers fell into Group 1 or Group 2 and which purposes of citation forms they recognised.

Table 1. Writers' perception of the roles of citation forms.

1. Function-oriented: placing emphasis -- 6/11
2. Form-oriented + function-oriented: Placing emphasis + creating variation/ maintaining the language flow-- 4/11
3. Form-oriented: creating variation/ maintaining the flow-- 1/11
4. Socially oriented: acknowledgment of previous work* -- 5/11

* The responses in Category 4 was overlapped with those in Categories 2 and 3.

Among the three purposes of citation forms, namely "*function-, form- and socially-oriented*" purposes, "*function-oriented*" refers to emphasising either the cited work by the use of the integrated citation form to or foregrounding own's own work by putting the cited work in the non-integrated citation form. The citation forms can shift the emphasis from the cited work to the writer's own argument (see Example 2). The majority of researchers (6 out of 11) stated the purpose of the integrated citation form as "*function-oriented.*"

Second, "*form-oriented*" here means that the non-integrated citation form is used to maintain the flow of discourse (maintaining the flow), while the integrated citation form helps to vary the same citation pattern. Although only one researcher mentioned that "*form-oriented*" is the main style of the citation forms, more than half the researchers (6 of 11) indicated that "*function- and form-oriented*" purposes are related. In fact, among interviewees who gave the "*function-oriented*" purpose as the main one, there is an indication of another purpose:

Example 3:

Interviewer: and in the citation here you cite names whereas sometimes you just put numbers.. is there any difference...

Interviewee(a professor of chemistry): yes I suppose this is just to draw attention to our previous work on this, really...

Interviewer: ah..so this is to do with..

Interviewee: these references are just um sort of background really, but these are the sort of specific things that that you know this work is based on..so these are key references really... these are sort of background, really...

Interviewer: so if there is a key reference you quote names...

Interviewee: *yes sometimes...*

“*sometimes*” here seems to suggest that he may use it for another purpose. In other words, Example 3 may manifest researchers' subconscious application of “*form-oriented*” purpose together with “*function-oriented*” purpose.

The researchers' perception of the link between the two purposes is shown in Examples 1 and 4.

Example 4:

Interviewer: can I ask a couple of questions about this paper..one thing is about citation pattern... I think mainly there are two patterns either you use brackets or use the researchers' names at the beginning or end of the sentence...do you distinguish them, is there any difference between them..

Interviewee (a senior lecturer of biology):

no it's just part of part of the convention...I mean that's the way ..I mean occasionally you want to say well um Harold showed so and so...by doing it that way it gets it makes less boring I think it gives you a...it does actually give you a slight variation in the way in which you refer to things if you did everything by giving statements following brackets by the authorities I think it gets to be extremely savvy so by occasionally picking up authors' names and say.. you know... especially... what you tend to do.. I think subconsciously anyway you tend to do that when you want to highlight you think the authors made a particularly significant contribution than by just highlighting the names and then say what they did.. I think it gets an emphasis that this was an important finding these people did it...

Interviewer: right if you like to criticise or give credit..

Interviewee: yeah I think you do that.. you tend to do that ...then also breaks up the pattern and you just give it a bit of variety.....then again that's the way I would use it..

It seems that “*creating variation*” helps to produce a change and therefore gives a prominence to certain work. The integrated citation form can be used for one purpose (variation) but it will also serve another purpose (emphasis) in a research article (see also Example 1). Thus the integrated citation form can enable writers to perform two purposes in texts. It is interesting to note that in both Examples 1 and 4, the writers described first “*form-oriented*” purpose and then “*function-oriented*” purpose. It seems easier to recognise “*form-oriented*” purpose as part of a linguistic device and this recognition seems to lead to a subconscious choice of the integrated citation form for emphasis on cited work. Therefore although less than half (4 out of 11) researchers identified both purposes, the interviews suggest that researchers may be subconsciously considering both “*form-oriented*” and “*function-oriented*” purposes simultaneously in the choice of citation forms.

This subconscious decision making seems to be shown in the recollection of a senior lecturer in soil science (Researcher K) shown in Example 5 as to the a purpose of his citation forms in Text 1 below.

Text 1 (from the introduction section):

The chemistry of calcareous soils will be affected to some extent by the amount, nature and reactivity of the carbonate minerals present. Thus the interactions between solution phosphate (P) and pure carbonatesx have been studied by several investigators (Cole et al. 1953; Kuo & Lotse, 1972; Griffin & Jurinak, 1973; Freeman & Rowell, 1981).

The surfaces of soil carbonate minerals are often modified by the presence of other cautions or anions (Lahav & Bolt, 1963; Talibudeen & Arambarri, 1964), so that they may react differently from the surfaces of pure calcite. Iron (Fe) oxides and oxyhydroxides can occur both as discrete components in soil and as coatings on other soil particles. Evidence for Fe oxide coatings on calcium carbonate surface surfaces has been reported by Ramulu & Pratt (1977) and Jolford & Mattingly (1975a), and for carbonates in Sudanses soils by Blokhuis et al. (1968).

Udo & Usu (1972) have shown that the removal of Fe and aluminium (Al) oxides can drastically reduce the capacity of soil to sorb P.

The writer’s recollection was:

Example 5

um it’s possibly an emphasis or it’s to say I want to talk about one particular piece of work; and in that particular piece of work by A and B da da da da was found in another piece of work by D and E such and such was found,... so certainly to incorporate into the sentence is more likely when you are referring to one particular piece of work; when you are referring to a number then you will probably you will probably use the bracketed reference system, but I’ve never thought of it before I’ve never had to explain to anybody before..ha ha ha...we don’t analyse what we are doing, we just do it...ha ha ha....

The same relationship can also be seen in the use of the non-integrated citation form. From a

form point of view, it helps to keep the flow of discourse and thus maintains the writer's argument without any interruption (see Example 1).

Third, “*socially oriented*” purpose refers to the use of the integrated citation form for the acknowledgment of previous work; for giving credit for the contribution of other work to the field. As in Example 5, several researchers (5 out of 12) mentioned acknowledgement as part of the reason for emphasising previous work.

However, it is not easy to identify acknowledgment of previous work in research articles without insiders' knowledge. For example, the linguistic forms in one of the research articles analysed suggest that the writer (Researcher J: a senior lecturer in plant biology) appears to employ the integrated citation form for a negative purpose (see the cited work in bold letters in Text 1). This does not agree with the claim of MacRoberts and MacRoberts (1987) that the writer dissemble negative criticism i.e. use of the non-integrated citation form.

Text 2 (from the discussion section):

Koostra and Harrington (1969) reported an increase in LPC in ageing cucumber seeds and did not report PA. In contrast, we did not find any lysopholipids in cucumber. Unlike our experiments, Koostra and Harrington (1969) did not use 2-dimentional TLC. What source of PA they used was not indicated in their report: synthetic PA may have different Rf values from those prepared by the action of phospholipase D on PC (Wuthier, 1976).

When the writer was asked whether he was criticising the underlined work in Text 2, his response was:

Example 6

um yes um yes but I mean technically it is a criticism but um it has to be understood in the context that um they published in 1969 it was the first paper on this topic (right) ..it was an important paper and and you know you will not get everything right first time.. it's inevitable.. it's not really a criticism of the past it's just ...

In this case the writer seems to be noting an understandable lack in the previous study rather than simply criticising it by the use of the integrated citation form, which reflects difficulty of identifying negative criticism for outsiders as Howard (2004) shows. He argues that negative citations do not necessarily indicate worthlessness, rather it shows controversy.

In another example, when the writer (Researcher H: a senior researcher in biology) appears to criticise one part of a previous study (underlined), he did not use the integrated citation for criticism (see Text 3).

Text 3 (from the discussion section):

Relationships between duodenal purine flow and urinary excretion of purine derivatives have been described (Chen et al. 1990; Bolcells et al. 1991) which correlated the active absorption of purine bases (apparent digestibility 0.85-0.90 for adenine and guanine respectively in this experiment) and the urinary excretion of xanthine, hypoxanthine, uric acid and allantoin. Confidence in our direct measurements of duodenal purine flow is provided by the close relationship between these values and the calculated values using urinary allantoin excretion (Table 6, Balcells et al. 1991). It is interesting that estimated purine flow based on total purine base excretion (Chen et al. 1990) was significantly higher than the measured values (Table 6, $P < 0.001$).

Researcher H did confirm that “*this area of science research is an area where there is a conflict.*”. Therefore, he seems to prefer drawing attention to the results of research rather than to the researchers who conducted the work, avoiding critical comments becoming a personal attack.

It seems that a common strategy can be to use the integrated citation form for emphasis to create a gap for positive or negative reason. However, when the criticism becomes too controversial to emphasise, researchers seem to avoid using the integrated citation form as shown in 4.3. Writers are considering both the readers’ knowledge of discipline and social interaction with the fellow members. It is interesting that researchers who later recognised the functions of citation forms always stated that they need to read a passage to recollect what their purpose was when they wrote the papers. Contextual knowledge is essential in understanding the purposes of citation forms. This suggests that each professional discourse community may have its own interpretation of linguistic forms. We may not be able to assume the same interpretation in different professional discourse communities although writers may share the same mother tongue. This may have some implications for language teaching.

3.4. Frequency of use of citation forms in relation to their roles.

The next task was to examine the frequency of each citation form. From the point of view of “*function-oriented*” use, as the amount of directly related work is limited, obviously there are not many papers to emphasise. With the less frequent use of the integrated citation form, the more impact it can have in a text. But by the same token, frequent use of the integrated citation form would break the flow of the writer’s argument, making it difficult to strengthen the development of the writer’s own argument. Thus, unless the work is directly related to the argument, writers may avoid using the integrated citation form for the citation. For a “*socially-oriented*” purpose, as it is closely related to “*emphasis*”, the same explanation seems to apply; the number of previous studies to criticise or pay tribute to is limited. It is easy to imagine to have relatively few occurrences of integrated citation forms as opposed to non-integrated forms. Thus we do not expect a lot of occurrences of the integrated citation form and this is what we found in the Table 2.

Table 2 shows the token number of the integrated citation forms in relation to the total number of citation forms for the 18 research articles with the total number of citations in each paper. This finding is similar to the results of Hyland's study but makes a sharp contrast to those of Charles (2006) which seems to explain not only the difference in the purpose but also the strict word limit of published papers and lengthy PhD theses. Charles shows that integral citation with human subjects is the dominant use in citing previous studies in both social and natural science PhD theses.

Table 2 Frequency of the use of the integrated citation form.

Paper number and type of papers	Writers (academic positions)	Disciplines	Instances of the use of integral citation form(% in the total number)	Total number of works cited in a paper
1: experimental paper (exp)	A: professor	microbiology:	6 (11%)	52
2: exp	B: reader	biology	14(20%)	69
3:exp	C: professor	chemistry	0	29
4: exp	C: professor	chemistry	3 (14%)	21
5: exp	D: lecturer	civil engineering	7 (15%)	44
6: exp	E: professor	chemistry	0	9
7: exp	E: professor	chemistry	3 (18%)	16
8: theoretical paper (theo)	F: professor	civil engineering	2 (28%)	7
9: exp	G: professor	physiology	1 (2%)	50
10: exp	H: senior researcher	biology	7 (19%)	36
11: exp	H: senior researcher	biology	11 (18%)	59
12: exp	I: professor	microbiology	5 (29%)	17
13: exp	I: professor	mocrobiology	1 (5%)	18
14: exp	J: senior lecturer	biology	3 (13%)	22
15: exp	J: senior lecturer	biology	3 (9%)	33
16: exp	K: senior lecturer	Soil science	15 (125%)	12
17: exp	K: senior lecturer	Soil science	9 (36%)	25
18: exp	L: senior researcher	biomechanics	3 (42%)	7

Although most researchers used very few integrated citation forms, some researchers used this form more than five times in their articles. For example, Researcher H used 10 and Researcher K used 7 integrated citation forms in one article. Why do they do? Which roles of citation forms is it most likely to be related to i.e. *"form-, function- and socially-oriented purposes?* I examined whether the same work was cited more than once in a research article. If it is the same work that writers repeatedly cite, they would find the cited work necessary in staking their knowledge claim.

Table 3 shows the works cited more than once in a section.

Table 3 Repetition of cited work in the integral citation form

Paper number and writers	Token / type number of integral citation forms	Details of the papers cited more than once in the integral citation forms
1: A	6/5	1 paper appeared twice in integral citation forms.
2: B	14/8	4 papers appeared twice, and 1 paper appeared three times in integral citation forms.
5: D	7/6	1 paper appeared twice in integral citation forms.
10: H	7/5	1 paper appeared three times in integral citation forms.
11: H	11/10	1 paper appeared twice and another paper had one author of the paper that appeared twice in integral citation forms
12: I	5/3	1 paper appeared three times in integral citation forms.
14: J	3/2	1 paper appeared twice in integral citation forms.
15: J	3/1	1 paper appeared three times in integral citation forms
16: K	5/15	1 paper appeared eleven times in integral citation forms.
17: K	9/8	1 paper appeared twice in integral citation forms
18: L	3/2	1 1 paper appeared twice in integral citation forms.

Researchers B, H & K who used more than ten instances of the use of the integral citation form in fact repeated the same work in integral citation form. These findings show that it is the repetition of the same work which increased use of the integrated citation form for the researchers. Those who used the integrated citation form more than 3 times in total repeated the citation of the same papers in the integral forms. Since the repetition of certain work in the integrated citation form draws attention from readers, the repetition seems to work as emphasis on certain previous work. Thus although the three purposes emerged from the analysis, the repetition suggests that “*function-oriented*” purpose is the major concern for the choice of the integral citation form. This finding seems to have some resemblance to those of citer motivation. According to studies on citer motivation, citers cite papers to persuade first and second acknowledge. For citation forms, citers employ integral forms first to emphasise which leads to strengthening their own argument, and second to acknowledge crucial studies and constraints of published papers.

5. CONCLUSION AND IMPLICATIONS

This study examined the purposes of citation forms in scientific and engineering research articles through text analysis and interviews with the writers to illuminate their perspectives on the purposes of citation forms. Interviews showed that most researchers were conscious of the purpose of citation forms and their comments revealed three purposes of citation forms: “*form-, function- and socially-oriented purposes.*” The writers’ perspective showed the close link among

them, which reflects writers' motivation for citation in citation analysis. One citation form may serve more than one purpose at one time i.e. writers employ integral citation forms to emphasise, to create a variation, and to acknowledge previous studies. Use of citation forms seems a relatively simply syntactic choice but when we consider writers' motivation behind, this study shows that the choice is not so simple. As was shown in studies on citer motivation in citation analysis, with the use of citation forms, writers are trying to create a more persuasive argument and to acknowledge important previous studies. Just like citation itself, effective use of citation forms should be understood as part of expert knowledge to construct professional discourse.

Since the construction of an academic text involves various factors such as the use of tense and type of reporting verbs, the roles that citation forms play in constructing an argument may be relatively minor. However, effective use of citation forms can strengthen the direction of an argument. These findings can be summarised as follows.

- 1). Most of the researchers seem to be conscious of the intention in using citation forms.
- 2). Citation forms need to be analysed considering both the disciplinary and social context; it is difficult to examine their purposes at sentence level.
- 3). The integrated citation form is much less frequent than the non-integrated citation form.

Although the researchers interviewed were not always conscious of the purpose of the citation forms, this information may benefit those who are trying to write a research article to join the research community as an insider. In order to improve their writing, novice researchers can take into consideration the comments of established academics on the use of citation forms.

Finally, since the number of the researchers interviewed and their research articles in this study were quite small, more studies will be necessary. It would be interesting to analyse academic texts with quotations. Citation forms may have different purposes in non-scientific academic texts. Second, to better understand academic discourse, it may be necessary to integrate the results of this study with data on reporting verbs and use of tense in academic texts.

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