"DIALOGGING": A SOCIAL INTERACTIVE PRACTICE IN ACADEMIC WRITING

Nancy Lea Eik-Nes Norges Teknisk-Naturvitenskapelige Universitet

ABSTRACT

This study of the practice of writing logs as part of an academic writing course examined the linguistic markers of interaction that characterize the texts of the logs. Based on Hyland's model of interaction in academic discourse, the texts were analyzed both quantitatively and qualitatively in order to describe the types and extent of interaction that were evident in the text. The results of the study indicate a high level of interaction and imply that the practice of writing logs—and especially writing "e-logs"—may well be considered as a forum for dialogue and meaning-making through writing.

KEY WORDS: Academic writing, log writing, linguistic markers of interaction, dialogue.

RESUMEN

Este estudio sobre la práctica de la escritura de *logs* como parte de un curso de escritura académica examina los indicadores lingüísticos de interacción que caracterizan a los textos de los *logs*. Basándonos en el modelo de interacción en el discurso académico de Hyland, analizamos los textos de forma tanto cuantitativa como cualitativa con el propósito de describir los tipos y el grado de interacción manifiestos en ellos. Los resultados del estudio señalan la existencia de un alto grado de interacción e implican que la práctica de escribir *logs*—y en particular la escritura de "*e-logs*"— bien podría considerarse como un foro para el diálogo y la aclaración de dudas a través de la escritura.

PALABRAS CLAVE: escritura académica, escritura de *logs*, indicadores lingüísticos de interacción, diálogo.

1. INTRODUCTION

In a scientific writing course for doctoral students in engineering, students were asked to submit weekly logs in the form of e-mails. One student concluded his fourth log like this:

(1) I have to say that these logbooks have [...] helped me to structure my thoughts, and though I probably still seem both quite vague and confused, it was actually much worse one month ago... (Brian)



The idea that a doctoral student is feeling vague and confused is perhaps not so noteworthy as Brian's claim that he regarded himself as less vague and confused now than he was a month ago, and that writing weekly logs had facilitated this development.

The field of academic writing has emerged out of a range of theories and practices concerning how students learn to write and how writing should be taught. A relatively recent view of writing education has been through an academic literacies perspective where the focus, put simply, is on the development of the student rather than on the development of the text (Lea and Street, "Staff"; Lillis; Lea and Street, "Academic"; Lillis and Scott). An academic literacies approach regards learning as a transformative process that takes place as students draw upon their own resources and experience to adjust and make meaning as they encounter new situations in their education. In academic literacies, the concern is with the epistemological aspects of academic practices rather than the surface features of a text. For the students, then, the focus is on negotiating their identities with their disciplines for which writing is an important aspect.

The study presented in this paper is part of a larger study that examined how writing logs, particularly e-logs, can be a factor in students' negotiation and development of their disciplinary identities (Eik-Nes). The larger study considered logs as a forum for dialogue (hence the term "dialogging"). While writing logs, students carried on dialogues with themselves, with their teacher and with their disciplines; they used these dialogues to discuss, challenge and reflect upon their identities in a way that might facilitate the development of their disciplinary identities (ibid.). In order to give credibility to the claim that dialogue actually took place, it was necessary to identify textual signs of subjective interaction in the logs.

Studies of texts have increasingly focused on the social context of language and the writers' subjective positioning of themselves in their texts (see, for example, Labov; Biber and Finegan; Bucholtz and Hall). Writers use words of evaluation to position both themselves and those with whom they interact through their texts (Hunston and Thompson; Biber). Hyland identified and quantified linguistic markers of academic interaction in research articles to demonstrate how scientific writers purposefully use linguistic interaction to "acknowledge, construct and negotiate social relations" and to position themselves and gain acceptance for their argumentation in scientific discourse (Hyland, "Stance") (see also Hyland, "Author", Hedging, "Bringing", Disciplinary, Metadiscourse).

The purpose of this study was to identify what characterizes linguistic interaction in student logs. It uses Hyland's model of interaction in academic discourse as a starting point to describe the kinds and relative degree of interaction that can be observed in the logs.

2. MATERIAL AND METHODS

The setting for the study was a 12-week course in scientific publication offered to doctoral students in engineering at the Norwegian University of Science



and Technology. For all but one of the students, English was an additional language. The course was taught in English and all assignments were in English. Materials for the course were texts that the students selected from their own reading for their doctoral projects, so that the students read, analyzed and wrote scientific articles in their own field of study.

In addition to their more formal assignments, students were asked to write logs for about 10 minutes each week, and submit them to their teacher. Students were not assigned any topics, but it was suggested that they write something about their doctoral projects. They were told to write freely and not be concerned about grammar, vocabulary or formatting. They were also told that the teacher would respond to their logs with either a comment or a question about the contents, but would *not* comment on, or correct, their use of English.

For the purpose of comparison, one group of students was asked to write their logs on paper and submit them in class, the other group was asked to write their logs as e-mails and submit them at any time. The general details of the corpus are shown in Table 1.

TABLE 1: THE CORPUS OF THE STUDY									
GROUP	Students	TOTAL NUMBER OF LOGS	Total number of words	Average Number of Words/log	STUDENTS WITH <150 WORDS/LOG	STUDENTS WITH 150-300 WORDS/LOG	STUDENTS WITH >300 WORDS/LOG		
paper-log	23	175	35,750	204	9	10	4		
e-log	22	187	44,458	238	4	12	6		
TOTAL	45	362	80,208	222	13	22	10		

The categories defined by Hyland in his model of interaction in academic discourse (see Figure 1) were chosen as a means of identifying signs of interaction in the texts. Hyland used this taxonomy to analyze research articles (RAs) in disciplines similar to the disciplines represented by the doctoral students, thus Hyland's data could be used as a basis for comparison between RAs and the two different types of logs; such a comparison could help determine the relative degree of interaction evident in the logs.

In his model, Hyland differentiates between markers of stance and markers of engagement. Markers of stance are the linguistic devices writers use to position themselves: hedges, boosters, attitude markers and self-mentions. Markers of engagement are the devices writers use to position their readers: reader pronouns, questions, directives, shared knowledge and personal asides.

An initial analysis of the logs revealed two more obvious markers of engagement: replies and apologies. While rare in research articles, they are relevant as markers of engagement in logs and have been included in this analysis.

Each of the categories of linguistic markers that have been used to identify and quantify interaction in this study is presented below with examples from the log texts.



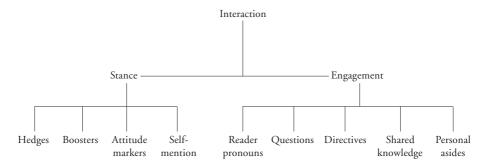


Figure 1: Linguistic markers of stance and engagement (from Hyland, "Stance" 177).

2.1. Hedges

Hedges are "words whose job it is to make things more or less fuzzy" (Lakoff in Hyland, *Hedging* 1). A writer uses hedges in order to indicate a degree of uncertainty in a statement (e.g. possibly, may, a bit, indicate, seems, appears) and indicate the writer's decision to withhold complete commitment to a proposition (Hyland, Hedging 178).

(2)This theory [...] would seem to be one of the more demanding combinations. (Richard)

2.2. Boosters

Boosters, according to Hyland, are "words which allow writers to express their certainty in what they say and to mark involvement with the topic and solidarity with their audience." (Hyland, "Stance" 179). Boosters (e.g. clearly, certainly, undoubtedly, well-known, recognized) give the impression that the author has clear knowledge and authority regarding whatever is being "boosted."

Last week was a best and a worse week. (Mark) (3)

2.3. ATTITUDE MARKERS

Attitude markers, again referring to Hyland, "indicate the writer's affective, rather than epistemic, attitude to propositions, conveying surprise, agreement, importance, frustration and so on, rather than commitment" (Hyland, "Stance" 180).

(4)Last week I have <u>struggled</u> to do some programming [...] It takes so much times to do this and I think it is not worth much. (Hannah)

(5) Will I manage to make a case study at all? I remember <u>feeling really lost</u> during the first period of this case study. (Jennifer)

2.4. Self-mentions

Self-mention refers to the use of first person pronouns (both singular and plural) and possessive adjectives to present propositional, affective and interpersonal information.

(6) <u>I</u> have done some literature studies, and now <u>I</u> am planning <u>my</u> experimental work. (Heather)

2.5. Reader Pronouns

In order to engage a reader, the writer has the possibility of addressing the reader directly (*you*, *yours*), or to share agency with the reader (*we*, *us*, *ours*).

(7) But, as <u>you</u> point out, there will always be people involved both for preventing the accident (e.g. operating and maintaining the barriers) and also as "victims." (Kurt)

2.6. Questions

Hyland claims questions are the strategy of dialogic involvement "par excellence," inviting engagement and bringing the interlocutors into an arena where they can be led to the writer's viewpoint (Hyland, "Stance" 185).

(8) Of course this is an important concept, my question is why the authors who write the articles do not give a definition first? Does everybody know it but me? (Shen)

2.7. Replies

Replies are students' responses to the comments or questions I wrote in my responses to the students' logs. They confirm a writer's intention to interact with the reader.

(9) You asked me [...] if I'm going to tell the people in the production about my work before I start my experimental work in the factory. And the answer is of course yes. (Molly)

2.8. Directives

Directives instruct the reader to perform an action or to see things in a way determined by the writer. Hyland notes that directives in the "hard sciences" are probably so common because these disciplines tend to use directives to economize their expression (Hyland, "Stance" 184).

(10) I'll try to explain using a figure (see attachment). (John)

2.9. Shared Knowledge

Appeals to shared knowledge position readers "within apparently naturalized boundaries of disciplinary understanding ... where readers are asked to recognize something as familiar or accepted" (Hyland, "Stance" 184).

(11) Today, during your lectures, I have heard few interesting point for a thinking. At the same time, I think this can be a topic and for one of my the logbook entries... Continuing the topic from the previous logbook I would like to say a few words about cooperation and relationship between the people. (Ilka)

2.10. Personal Asides

Personal asides allow writers to address readers directly by briefly interrupting the argument to offer a comment on what has been said; the comment is often enclosed by parentheses. As Hyland describes them, personal asides are made by the writer's "turning to the reader in mid-flow ... the writer acknowledges and responds to an active audience" (Hyland, "Stance" 183).

(12) Knowing the speed of sound in air would be knowing the velocity of the signal in the earth (which changes from rock type to rock type). (John)

2.11. Apologies

Apologies (and excuses) are the writer's way of asking the reader for forgiveness or tolerance, and signal the wish to maintain a good relationship with the reader.

(13) I am sorry that I am writing not in time, but I was very busy all this weak. (Kim)

The numbers of markers of interaction were tallied and averaged for each student, each category and each type of log. The averages for each type of log were



then compared to averages of the RAs from the relevant disciplines in Hyland's study.

3. RESULTS

The results of the analysis of the markers of interaction in the log texts and the corresponding RA results are shown in Table 2.

TABLE 2: LINGUISTIC MARKERS OF INTERACTION (PER 1000 WORDS). A COMPARISON OF RESEARCH ARTICLES (RAS), PAPER LOGS AND E-LOGS							
	RAs*	Paper logs	E-logs				
Hedges	10.3	5.0	6.6				
Boosters	4.5	1.8	2.5				
Attitude markers	4.2	23.8	20.1				
Self-mention	3.3	52.3	53.4				
Reader pronouns	0.9	0.7	8.6				
Questions	0.1	0.4	3.6				
Replies**	_	0.2	2.1				
Directives	2.1	0.7	1.6				
Apologies/excuses**	_	0.1	1.0				
Shared knowledge	0.3	0.5	2.9				
Asides	0.0	0.4	0.7				
Total	25.7	85.9	103.1				

^{*} The numbers are the average number of markers of interaction in a corpus of RAs in physics, biology, mechanical engineering and electrical engineering as reported by Hyland ("Stance" 187). The numbers differ from the totals Hyland presented, since the disciplines of philosophy, sociology, applied linguistics and marketing are omitted here.

Considering the relatively informal nature of logs, the numbers of markers of interaction were expected to be greater in the logs than in the RAs. This was the case: the number of markers in the paper logs was three times as great, and in the elogs four times as great as the number of markers of interaction in RAs.

The table also reveals that most of the differences between the total numbers of linguistic markers of interaction in RAs and logs are due to the high numbers of attitude markers and self-mentions. Given the seemingly informal, private nature of logs, it is not surprising that there are relatively many personal, affective markers, and that the total numbers of markers of interaction are high. Although expected, these differences warrant our attention.

^{**} These markers of engagement are not used by Hyland and can therefore not be compared.

Other noticeable differences between paper logs and e-logs are found in four categories—reader pronouns, questions, replies and shared knowledge—all of which are categories of engagement.

4. DISCUSSION

Counting and categorizing markers of interaction provided information about the relatively high use of markers of interaction that could be observed in the texts. The numbers suggest that the level of interaction is far more extensive in logs than in RAs. It is also significantly greater in e-logs than in paper logs.

While the numbers indicate a relatively high degree of interaction and imply that dialogue may in fact take place, the process of identifying the markers revealed reasons to be cautious in interpreting the numbers at face value. In order to categorize the markers, it was necessary to examine their context and co-texts. This analysis was a process which provided insight into the functions of the markers that must be considered in any interpretation of the numbers. On the whole, the analysis revealed a qualitatively deeper level of interaction and reflection than was reflected in the numbers.

The following comments on the categories are relevant in interpreting the results in Table 2 and in understanding the logs as a forum for dialogue.

4.1. Hedges

Few of the hedges in the logs resembled hedges in RAs, where the writer uses hedges to tone down a finding or an opinion. The most common type of hedges in logs were related to the doubts the students had regarding their own ability to meet the demands and deadlines that a doctoral student is faced with. These hedges were invariably collocated with self reference and negation:

... but I will probably not be finished in time. (Sarah)

4.2. Boosters

There were relatively few boosters in the corpus. The lack of boosters could perhaps be attributed to the relatively high number of attitude markers, many of which acted as boosters, but did not fit the category as used by Hyland.

4.3. ATTITUDE MARKERS

Considering the informal, reflective types of texts that comprised both paper and e-logs, one might expect a rather large number of attitude markers, and this



was the case. Verbs such as *struggle*, *worry*, *fear*, characterized the feelings of a doctoral student. Further analysis showed that the use of dynamic verbs (e.g. *struggle*) was more common than the use of static verbs (e.g. *was*), especially in the e-logs. Students also used a range of adjectives such as *afraid*, *frustrated*, *depressed*, *scary*, *fascinating*, *happy*, thrilled that served to convey their emotions.

(15) This week I am <u>wondering</u> about whether people in industry avoid decisions ... we postponed the decision and they called it a success. I was <u>stunned</u>. (Carl)

Analysis of attitude markers revealed that the division of stance and engagement is artificial, since most attitude markers functioned as ways for students to establish a stance while making attempts to engage their reader. Emoticons, onomatopoetic expressions and exclamation points (for example: ":-) ;-) :-(" and other emotional outbursts such as "yeah," "hurrah," and "GGRRR") indicated the writer's affect while also functioning to engage the reader. A smiley or winking face was not only a presentation of a positive attitude or joking manner on the part of the writer, but also an invitation to the reader to join in on the pleasant feelings or the joke. Or, in the case below, the wink ";D" could be categorized as a hedge of uncertainty, an attitude marker to present the writer as a friendly person (stance) or a way of catching my attention and seeking my reassurance (engagement):

(16) I feel a little bit worried: some students at the course have already published articles and have been working as researcher for years whereas I have only obtained my master last year (I'm 24), I have never published an article so maybe I'm not that good in writing review article...;D (Peter)

Attitude markers located in the first sentence of a log also served to engage the reader as much as to take a stance. Richard, for example, used attitude markers as a way to "hook" his reader with a humorous, attention-getting first line:

(17) This week I have found out <u>how enjoyable industrial espionage</u> can be. (Richard)

Other students started their logs with negative attitude markers to call attention to their predicament and engage me as their reader.

(18) I have never been so sad and frustrated ever in my life. (Karen)

The process of identifying attitude markers revealed a major challenge regarding counting. Consider the following excerpt:

(19) From rumours and stories I have heard that this description [project description] are only going to be read by a horde of bureaucrat who actually do not give a "sensured words" about what you write as long as it is between five and ten pages. (John)

There is not a single word in the text that qualifies independently as an attitude marker according to Hyland's categories. However, the text as a whole leaves the reader with no doubt about the writer's attitude.

4.4. Self-mentions

Self-mentions were by far the most commonly used markers of interaction in both paper and e-logs (average 52.8/1000) and were used by every student. As could be expected, this is in stark contrast to the use of self-mention in RAs (average 3.3/1000) where writers tend to avoid self-mention in order to give the impression of objectivity.

While the prevalence of "I" in the log indicated the writer's willingness to be visible, not all instances of "I" in the logs could be construed to indicate a high degree of interaction. "I" was sometimes a simple placeholder in a sentence, rather than a sign of interaction. This was demonstrated in logs of the three students whose paper logs had the largest number of self-mention per thousand words (80.9/1000, 88/1000 and 100/1000, respectively). Notably, the total number of words in the combined logs of each of these students was less than 1000 words (680, 780 and 970, respectively). The logs with relatively many self-mentions tended to resemble lists in the form of simple or compound sentences, as in the following text in which self-mentions comprise 15% of the text:

(20) <u>I</u> have done some literature studies, and now <u>I</u> am planning <u>my</u> experimental work. <u>I</u> hope <u>I</u> will be able to start doing some experimental work this autumn. On Monday <u>I</u> had a meeting with people from the industry [name of company] where <u>we</u> discussed the experimental scheme. (Heather)

In contrast, there were writers who constructed their texts with no self-mentions by leaving out the subject of their sentences. Even without self-mentions, however, there was no doubt that the writer was the subjective agent:

(21) Wrote and rewrote a rough draft. Difficult to find a good way to organize the material. Still going back and forth on which topics to include. Found out that the review will be a topological one, in an informative style. (Barbara)

The overall significance of self-mentions was not the numbers, but the writer's self—often a reflective self—in relation to the theme of the text:

(22) <u>I</u> feel a professionally risk in labeling <u>myself</u> as industrial ecologist while the definition of industrial ecology is still remain fluid. I stead of labeling, <u>I</u> should get a professional grounding in the conventional discipline of <u>my</u> choice—applied thermodynamics. This will be provide <u>me</u> with a clearly recognized professional identity, one that <u>my</u> employers and colleagues can readily admit. (Maria)



According to Hyland, the most frequently used engagement device in academic writing is "we" (Hyland, "Stance" 182). In the logs, however, "you" ("your") was by far the most common reader pronoun, especially in the e-logs. Whereas the research article is addressed to an unknown mass of readers (we) who assumedly have some common disciplinary interest with the writer, the log can be addressed to a specific person (you).

(23) Your comparison with toothpaste is not so bad actually, because that is exactly what it looks like (a bit unpleasant colour though). (Max)

As a familiar and quick way of maintaining communication, the medium of e-mail is conducive to interaction between writer and reader; the relatively common use of "you" could thus be expected. It also implies a relationship between the writer and reader that encourages dialogue, as when "I" and "you" are in the same sentence:

(24) Today I write to you just hope someone could share my joy. (Shen)

4.6. Questions

According to Hyland, the questions posed in RAs are rhetorical questions which the author answers immediately after asking the question. In the logs, in contrast, questions are either direct questions to the reader (only in e-logs) or rhetorical questions that represent students' reflections.

(25) One of the speakers claimed that innovations processes is not really a topic of research [...] I felt provoked by this statement. What implications has his statement? That only phenomena with a systematic and rational nature is qualified as a topic of research? That my project is just a waste of time? That the addressed need for more knowledge on how to facilitate creativity and innovation should be silenced because no answers can be found? I don't think so. (Jennifer)

Questions in the logs are important indicators that logs provide a forum for dialogue. Direct questions demonstrate that the writer is attempting to make direct contact with a specific reader, with expectations of response. Questions, like Jennifer's above and Shen's below, seem to be a way for the writers to reflect upon and challenge their disciplines and their own roles within those disciplines.

(26) The tem [term] of marginal cost of water in irrigation system is discussed everywhere, but I can not find the definition of the concept of marginal cost of water in irrigation system... Of course this is an important concept, my question is why the authors who write the articles do not give a definition first? Does everybody know it but me? (Shen)



Replies are significant in that they indicate a willingness to maintain interaction and possible dialogue between the writer and the reader. The numbers of replies in the logs reflect a significant difference between paper logs and e-logs: there were only nine replies in the paper logs (although the reader/teacher had asked 79 direct questions); in the e-logs there were 88 replies to 88 questions posed by the reader/teacher.

4.8. Shared Knowledge

Of the remaining categories (directives, apologies, shared knowledge and personal asides), shared knowledge is the category that provides most insight into the dialogic character of the logs—especially the e-logs. In their logs, students referred to what had been discussed in class, continued writing about a theme they had previously taken up in their logs, or picked up on comments the teacher had written. In this way, the log writers used shared knowledge to establish a basis for dialogue between the writer and the reader. They used this shared knowledge as they reflected upon the shared traditions and values in their disciplines.

(27) I am in the fortunate position that in principle I can choose to work with or get ideas from several clever people working within my field. This might, however, be a disadvantage when writing papers, due to the fact that clever and ambitious people like to have their names on papers. I think my supervisor is a little bit worried about this, since I already have started cooperation with another professor. He lectured me to make this other professor do his share of the work. This is much in line with what you said in the lecture two weeks ago. I am not used to thinking about credit and publication, but I just as well have to get used to it! (Gordon)

5. CONCLUSION

The results of the study showed a relatively high prevalence of linguistic markers of interaction in logs, and that the markers of interaction were even more prominent in e-logs than in paper logs. These findings indicate that the logs are a relevant forum for dialogue. Hyland's model of interaction in academic discourse provided a taxonomy that revealed the variety and the relative incidence of markers of interaction. However, closer analysis of the contexts and co-texts of the markers revealed that using the model to achieve only quantitative results was insufficient and sometimes even misleading. A qualitative analysis of the markers provided insight into their complexities and significance.

On the whole, this study indicates that logs provide a forum for interaction and dialogue. It also indicates that e-logs are more conducive to interaction than



paper logs. This practice of "dialogging"—observing, questioning, challenging in dialogue—may indeed be considered a means of facilitating student development.

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