

Just to give you kind of a map of where we are going:
A Taxonomy of Metadiscourse in Spoken and Written
Academic English

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Abstract

One of the basic functions to which language is put is to comment on discourse or on language itself. Reflexivity in language occurs in everyday discourse as well as in specialised discourse, such as academic papers or lectures. It is often referred to as metadiscourse, or 'discourse about discourse', as in *In this paper, I explore...* or *just to give you kind of a map of where we are going...* Such expressions are very common in academic genres, where the writer/speaker is expected to guide the audience through the discourse, for example by making its structure explicit. While research into metadiscourse has focused on academic writing, academic speech has remained largely unexplored. Furthermore, comparisons of spoken and written metadiscourse are rare, so the similarities and differences between spoken and written types of metadiscourse are unknown.

The present qualitative and corpus-based study compares the use of personal metadiscourse in 30 spoken university lectures to that of 130 highly proficient essays by graduate students. The purpose is to present an empirically based taxonomy of the discourse functions of spoken and written metadiscourse with respect to academic English. Despite claims in previous research that separate treatment is needed, a lumping approach is taken rather than a splitting one. The goal is to create one taxonomy for both modes, thereby highlighting both similarities and differences in the distribution of discourse functions across speech and writing.

The proposed taxonomy consists of 23 discourse functions, divided into four main categories: *Metalinguistic comments*, *Discourse organisation*, *Speech act labels* and *References to the audience*. The findings reveal that most of the discourse functions in the taxonomy occurred in both speech and writing, although spoken metadiscourse performed a greater range of discourse actions than written metadiscourse. Differences in the conditions of speech and writing did indeed cause variation in the use of metadiscourse: The discourse functions REPAIRING, MARKING ASIDES and CONTEXTUALISING occurred only in the spoken data because of the lack of time for planning and revision in real-time discourse, while MANAGING COMPREHENSION/CHANNEL and MANAGING AUDIENCE DISCIPLINE occurred only in the spoken data because of the direct presence of an audience. Factors related to genre were also found to cause variation in the use of metadiscourse: ARGUING was considerably more common in the written data, since academic writers typically need to put a great deal of work into argumentation, while lecturers generally present information not based on their own research. MANAGING THE MESSAGE, on the other hand, was common in the spoken data, which can be attributed to lecturers adopting a more authoritative role than student writers.

1. Introduction

The concept of reflexivity in language (see e.g. Hockett 1977; Lyons 1977; Lucy 1993) goes back to the metalinguistic function in Jakobson's (e.g. 1998) typology of the functions of language. What reflexivity and the metalinguistic function refer to is, essentially, the capacity of natural language to refer to itself. Language users can use language to comment on language itself, the communicative situation, and their own roles in it.

Although Jakobson (1980) noted how common the metalinguistic function is in everyday language, most research into this function has been concerned with academic discourse—in particular, written academic discourse. Since the late 1980s, a relatively large body of research has developed on the basis of the phenomenon of 'metadiscourse' and its workings in written academic text, for example by Vande Kopple (1985; 1988), Crismore (1989), Markkanen et al. (1993), Mauranen (1993), Hyland (1998; 2005), Ädel (2006).

The research area of metadiscourse is not unified; rather, two quite different strands can be discerned, as noted by Mauranen (1993) and Ädel (2006): one adopting a narrow definition (referred to here as the 'reflexive model') and another adopting a broad definition (referred to here as the 'interactive model'). In the reflexive model of metadiscourse, reflexivity in language is stressed and is taken to be the starting point for the category. In the interactive model, by contrast, reflexivity is not a criterion but, instead, the concept is used to describe interaction—primarily in written text—between the writer and audience, conceived broadly. As I believe this approach to lead to the lumping of too many phenomena under 'metadiscourse', I adopt here the reflexive model.

The aim of this paper is to provide an analysis of the different types of metadiscourse that occur in spoken academic English—specifically, in the discourse of lectures. Written academic English—here in the form of highly proficient student papers—will be referred to throughout in order to bring into relief the specifics of spoken metadiscourse. A taxonomy of discourse functions of metadiscourse covering both speech and writing is offered.

In preparation for the comparison of the metadiscourse of speech and writing, I first give a brief overview of previous research on the two modes, which is followed by a summary of previous research on spoken metadiscourse. Section 2 introduces the present model of metadiscourse, while Section 3 describes the material and method used for the study.

Section 4 gives an account of the inclusions and exclusions of expressions involving the pronouns ‘I’, ‘we’ and ‘you’, on which the study will focus. Section 5 presents a taxonomy for the discourse functions of metadiscourse, illustrated with examples from the corpus material. In Section 6, I compare the discourse functions across speech and writing and discuss discrepancies in their distribution. Section 7 concludes the paper.

1.1 Previous research on speech and writing

At this point in time, we have approximately sixty years’ worth of accumulated knowledge about the relationship between speech and writing. Excellent summaries of previous research and approaches to the spoken versus written modes are found in Baron (2005), Biber (1988), Chafe & Tannen (1987), and Roberts & Street (1998). The “great divide” perspective which was predominant in the 1980s—in which speech and writing were essentially treated as apples and oranges—has largely given way to a view of language as embedded in social practices, with the spoken or written mode as such exerting no crucial influence on linguistic production. Thus, the pendulum has swung from a situation in which mode meant categorical difference—i.e. orality and literacy were seen as dichotomous—to one in which mode is largely irrelevant as a discourse constraint, but rather trumped by considerations such as context and genre. This is summarised in Besnier’s (1988:707) statement that “[t]he structural relationships of spoken and written language must be explained in terms of the social context of orality and literacy in different literacy traditions, rather than the cognitive demands of language production and comprehension in the spoken and written modes”.

Portraying speech and writing as static systems encoded by different media appears especially untenable with the advent of electronic media and the increased diversity of forms of communication (e.g. synchronous writing, as in chat, and asynchronous speech, as in a recorded and edited spoken talk). Instead, linguists, such as Chafe (1982), draw attention to the influence of contextual factors, specifically shared time and space, in any form of language production.

The observation that the amount of time available and the possibilities for interaction profoundly influence the linguistic output means that there are at least two constraints on spoken discourse which

generally do not apply to written discourse. Those include (a) lack of time for planning and revision, and (b) the presence of an audience which is able to contribute to the discourse in real time. As for (a), what is in focus in the present study is university lectures which have been planned beforehand to some extent, but which are still given 'live'. As for (b), the lectures have a live audience present, but the degree of interactivity is somewhat limited in the context of a lecture. Despite the relatively formal and monologic nature of these lectures, we can expect to find certain differences between academic speech and academic writing due to (a) and (b).

1.2 Previous research on spoken academic metadiscourse

The literature on the relationship between speech and writing helps to predict how spoken and written types of metadiscourse may differ. Previous work on metadiscourse has neglected to make this comparison for the main reason that research into metadiscourse has almost exclusively dealt with written language (for a summary of previous research into written metadiscourse, see Ädel 2006). Very little research has considered spoken and written metadiscourse simultaneously, and there are even fewer examples of research attempting to paint a unified picture of the types of functions that metadiscourse fills in academic discourse. My aim is to present a single taxonomy of the discourse functions covered by both spoken and written metadiscourse, so I will act a lumpner rather than a splitter. The rationale for this is that the differences and similarities between spoken and written metadiscourse will be easier to capture with a unified approach.

The existing previous research on spoken metadiscourse in academic English is represented by Luukka (1994), Mauranen (2001), Pérez-Llantada (2006) and Thompson (2003). The spoken genres which have been studied include academic lectures (Mauranen 2001 and Pérez-Llantada 2006) and academic conference talks (Luukka 1994 and Thompson 2003).¹

¹ There are a few additional studies of metadiscourse in spoken language; for example, Swales (2001) offers a discussion of metadiscursive expressions involving 'point' and 'thing' in a subset of MICASE (see Section 3), while Ilie (2003) studies metadiscourse in parliamentary debates. Furthermore, Keller

This research has, for the most part, focused exclusively on spoken discourse rather than on comparing speech and writing. Two of these sources, however, comment on both spoken and written metadiscourse: Mauranen (2001) and Luukka (1994).² Mauranen (2001) presents a splitting approach, stressing the differences between spoken and written metadiscourse. She explicitly comments on the desirability of splitting, stating that it seemed “more appropriate to try out other bases for categorisation than have been found relevant to the written mode” (2001:210). Luukka (1994), by contrast, takes a lumping approach and applies the same functions of metadiscourse to both spoken and written data. Luukka does not explicitly comment on her lumping strategy, however. It is possible that the material used (spoken and written versions of the same five papers delivered at a conference) may have appeared relatively uniform, due to the fact that she (a) considers highly monological spoken data, and (b) adopts the interactive model, which includes expressions of stance. The material used by Mauranen, by contrast, is quite diverse. Not only does it include both monologic and dialogic types of spoken discourse in academic contexts, but it also takes into consideration a much larger number of speakers, ranging from senior lecturers to undergraduate students.

Comparing the taxonomies used by Mauranen and Luukka, we find that they both consider three subtypes, summarised in Table 1.

(1979) and Schiffrin (1980) examine (aspects of) metadiscourse in non-academic spoken conversation.

² Although Pérez-Llantada (2006) also compares metadiscourse in academic speech and writing, her focus is primarily on form rather than function, which means that her findings are not immediately relevant here. Thompson’s (2003) study, for its part, deals exclusively with text-structuring markers in spoken lectures, and written discourse is not brought in.

Table 1. Taxonomies used in Mauranen (2001) and Luukka (1994)

Subtypes in Mauranen (2001)	Subtypes in Luukka (1994)
<i>monologic</i> (organising the speaker's own ongoing speech)	<i>textual</i> (used by author to structure text)
<i>dialogic</i> (referring and responding to interlocutor's talk)	<i>interpersonal</i> (used to signal attitudes towards the content of the text or people involved in the communication situation)
<i>interactive</i> (eliciting response from interlocutor, e.g. asking questions, choosing the next speaker)	<i>contextual</i> (used by author to comment on the communicative situation or the text as a product)

In Mauranen's taxonomy, which applies to speech only, the point of departure is whose talk is being commented on, organised or elicited: the speaker's own or the interlocutor's. It is who takes the discourse initiative that is of primary interest. In Luukka's taxonomy, on the other hand, we find as the guiding principle the conventional distinction between text-organising and interactive expressions (the latter also including what I would term 'stance', as Luukka subscribes to the interactive model of metadiscourse), as well as an additional category of 'contextual' metadiscourse, which primarily seems to cover cases in which the speaker refers to audiovisual materials. Mauranen does not present any further subcategories as part of her taxonomy, whereas Luukka does: for example, 'signals of interactional attitudes' in 'interpersonal' metadiscourse, which is further split into 'presence of author (I)'; 'presence of audience (you)'; and 'presence of author and audience (we)'.

Neither Mauranen's nor Luukka's taxonomies will be applied here, as my interest is in specific discourse functions rather than in general subtypes of metadiscourse (see further Section 5). Also, while Mauranen's and my general definitions overlap for the most part, my intention here is to adopt a lumping rather than a splitting strategy as far as spoken and written types of metadiscourse are concerned.

2. The present model of metadiscourse

Metadiscourse is defined here as “reflexive linguistic expressions referring to the evolving discourse itself or its linguistic form, including references to the writer-speaker *qua* writer-speaker and the (imagined or actual) audience *qua* audience of the current discourse”, following Ädel (2006).³ The reflexive model is used, which also follows Ädel’s (2006:27ff) criteria for metadiscourse: ‘explicitness’, ‘world of discourse’, ‘current discourse’, and—for personal types of metadiscourse—‘speaker-writer *qua* speaker-writer’ and ‘audience *qua* audience’. The ‘explicitness’ criterion (based on Mauranen 1993) refers to the fact that it is the explicit (and intended) commentary on the discourse as discourse that is of interest. The ‘world of discourse’ criterion states that the action should take place in the world of discourse rather than in the ‘real world’; put differently, it should be discourse-internal rather than discourse-external. The ‘current text’ criterion (based on Mauranen 1993) refers to the fact that metadiscourse makes reference to the current text rather than other texts; the latter would instead constitute intertextuality. The same principle applies to the current addresser and the current addressee, with the added requirement that they be talked about or referred to in their roles as discourse participants—that is, in the world of discourse. Section 4 provides examples to illustrate these criteria.

One aspect of the ‘current text’ criterion merits special attention. The present data suggest that the borders between events in spoken and written genres be treated somewhat differently. In spoken lectures, we often need to consider a class or a lecture series as one and the same ‘speech event’ or ‘text’, even though it is spread out in time and space. As well as referring to preceding and following locations within one and the same lecture unit, lecturers also refer backwards and forwards to previous and coming sessions, much in the same way as writers refer back and forth to sections and chapters (an example from the lecture data is *right this is where we started last time you can think of it in terms of...*). The position adopted here is that, as long as a stretch of discourse

³ Ädel (2006) exclusively investigates written metadiscourse, so the definition has been somewhat modified in its wording to accommodate both written and spoken types of metadiscourse.

points to a lecture on a similar theme (with the same overarching purpose) by the same lecturer, addressing the same audience, it does not matter whether the lecture is not contiguous in time with the stretch of discourse in which the utterance was made. In other words, it is possible to consider something the ‘current text’ rather than ‘intertextual’ (which is by definition not metadiscourse) regardless of whether it takes place today, a week ago, or in a week’s time. This position is also suggested by Mauranen (2001:204), who states that “[a] good deal of discourse organising talk refers to previous or later events which can be in an important way thought to be part of the ongoing discourse - as for instance in the case of a lecture series”.

3. Material and method

The type of spoken academic English examined for this study represents a largely monologic genre: the university lecture. Transcripts from 30 large lectures from the Michigan Corpus of Academic Spoken English (MICASE; Simpson et al. 1999) were analysed, involving 33 hours of recordings and totalling 255,000 words. Almost all of the large lectures in the corpus are delivered in a traditional, monologic style, and they all have at least 40 students in the audience. The lectures represent a range of different subdisciplines from all four main academic divisions at the University of Michigan (the humanities, social sciences, physical sciences, and biological and health sciences).

The use of the selected personal pronouns and the discourse functions of metadiscursive units in the spoken data were compared to equivalent units in written academic English. The written data come from a corpus of written papers by advanced university students, represented by a subset of MICUSP, the Michigan Corpus of Upper-level Student Papers (see Ädel & Römer 2009), consisting of 130 A-grade papers by senior undergraduate and graduate students, which amount to just over 400,000 words.

The two data sets are not ideal for comparison. For example, the lecture genre involves an expert addresser and an audience of (more or less) novices, while the student paper genre involves a (more or less) novice addresser and an expert audience. Qualitatively, however, the comparison will still help to highlight what the differences and similarities are between spoken and written types of metadiscourse in

academic English. In a future quantitative study, a corpus of published research articles in English (currently under construction) will be used as a more appropriate match for the lectures.

Following Ädel (2006), corpus-linguistic methods were used to retrieve potential examples of metadiscourse (the search terms were ‘I’, ‘we’, and ‘you’), and then manual analysis of each example was performed in order to sift out irrelevant examples.

Only personal types of metadiscourse were studied, specifically units involving ‘I’, ‘we’, and ‘you’. Personal metadiscourse includes reference to the discourse participants, as in *As for the seemingly common misconceptions **I mentioned above...***, while impersonal metadiscourse includes no explicit reference to the discourse participants, as in *Doubtlessly, the **above-mentioned** conditions have a beneficial effect on...* (examples from Ädel 2006:14-15).

3.1 Disregarded data

Two types of data were disregarded in the study: quoted material and dysfluencies. Examples to illustrate disregarded data will be given below.

As argued elsewhere (e.g. Ädel 2006 and Mauranen 1993), when a phenomenon such as metadiscourse is studied, what is of interest is the wording of the current writer or speaker, not that of an external writer or speaker. This means that words borrowed from other sources—which tend to be quite common in academic discourse, whether written (see e.g. Hyland 1999; Ädel & Garretson 2006) or spoken (Ädel 2008)—need to be disregarded.

The following examples from the lecture data illustrate such disregarded sequences, where the stretch of discourse in focus is put in boldface:

- (1) in that phrase, postquam bella civilia exstinxeram consensu universorum after **i had extinguished** civil war, by the consensus...
- (2) so the liver is saying, okay, **i’m in trouble, i wanna shut down** glycolysis, which means...
- (3) one also by Randy Newman on his latest album, C-D, **i’m dating myself**
- (4) okay. um, we’ve covered **who am i, who are you?** um, you guys are...
- (5) and i say **we** because, the disadvantage of women most women are...

Example (1) represents a translation into English of a Latin text (where the ‘I’ refers to Caesar, not the lecturer). Example (2) is part of a quote

voiced by a hypothetical liver and not the current speaker, who is a lecturer in biology. The occurrence of 'I' in example (3) is part of a title. While examples (4) and (5) are strictly speaking not examples of quoted material; they represent cases of 'mention' rather than 'use' (see e.g. Ädel 2006:160) of the personal pronouns 'I', 'you' and 'we'.

Even formal and pre-planned types of spoken data, as in the case of lectures, typically involve a certain number of dysfluencies. Examples of false starts (6), repetition (7) and self-interruption (8) were disregarded on the basis of not representing complete metadiscursive units.

(6) good question **i_ i'll have to_** i'll email um one of the authors...

(7) okay **i'm gonna** i'm gonna carry that comment on because...

(8) now, **i wanna just give you two different_** i want to now contrast...

Another rationale for excluding such occurrences was to avoid boosting the number of occurrences simply due to a phenomenon which occurs in speech but not in writing.

Once the quoted material and the dysfluencies had been removed from the spoken data set, a total of some 10,000 examples remained. These examples were manually checked, and approximately 50 per cent of these were deemed not to function as metadiscourse.⁴ The next section will further explain which examples were considered non-metadiscursive.

4. Metadiscursive 'I', 'we', and 'you'

The pronouns 'I', 'we' and 'you' can be used for a range of different purposes, not all of which serve a metadiscursive function (see Ädel 2006:30ff). Consider examples (9)-(14), which all involve a first person plural perspective.

(9) now, think back to what **we were talking about** earlier on in this hour

(10) so **we're going to discuss** the most common, charges that they have.

⁴ In the written data set, a total of 3,648 examples were retrieved based on the pronouns. Once quoted material and non-metadiscourse examples had been sifted out, just under 800 relevant examples remained.

- (11) so this could be, uh water in Venice, and **we're going to put**, a, salt of a heavy metal, into that water source.
- (12) so, um, there's been a lot of research, done on this [...] that's a problem with a lot of our ecological studies that **we don't have** long-term data and **when we're looking at** population cycles **we need** long-term, kinds of studies
- (13) they can really do the most incredible things in France that **we are not allowed to do**
- (14) gee, maybe the reason why we like **we tend to universally like** sweets and fats, is because of our evolutionary heritage

Note that, according to the interactive model of metadiscourse, every single occurrence of these pronouns is as an example of metadiscourse. In the reflexive model, by contrast, not all instances of such pronouns are considered self-reflective. While all of these pronouns mark 'involvement' (Chafe 1986) with the audience, the metadiscursive function is dominant only in certain contexts: specifically, in examples (9) and (10). Although such involvement features naturally may affect the relationship between the writer-speaker and audience—as emphasised by, for example, Crismore (1989) and Hyland (2005)—according to the reflexive model of metadiscourse, occurrences of first and second person pronouns do not automatically qualify as metadiscourse. This is where the self-reflective criteria of 'world of discourse', 'current discourse', 'speaker-writer *qua* speaker-writer' and 'audience *qua* audience', reviewed in Section 2, are applied.

Examples (10) and (11) above may illustrate the 'world of discourse' criterion: (10) involves doing something communicative (discuss), and (11) involves doing something in the physical world which has nothing to do with communication (put salt into something). In both examples, the lecturer is stating what is going to come next in the lecture (*we're going to*), but (11) is crucially carried out in the 'real world' and is thus not considered metadiscourse.

Only examples (9) and (10) meet the criteria 'speaker-writer *qua* speaker-writer' and/or 'audience *qua* audience', while examples (11)-(14) have no metadiscursive reference. There are oftentimes contextual clues present in the data which reveal something about the scope of a pronoun. For example, in (12) 'we' refers to researchers in the field; in (13), 'we' is contrasted to people 'in France', presumably meaning people in America; and in (14), 'we' is modified by 'universally', indicating that the speaker is talking about the human race as a whole.

None of these examples are considered metadiscourse in the reflexive model.

It is useful to think about metadiscursive reference in terms of personas. In a given discourse, the speaker-writer may appear in a range of different personas, only some of which are metadiscursive. For example, the speaker-writer may be visible as organiser of and commentator on the discourse, participant in the discourse scenario, teacher of the course, researcher in the field, or experiencer in the ‘real’ world—that is, as participant in popular culture, US citizen, or fellow human being. The audience, meanwhile, can also appear as commentator on the discourse, as participant in the discourse scenario, as student on the course, novice researcher, or, naturally, experiencer in the ‘real’ world.

The distinction between the current discourse and the current course, for example, can be related to personas being teachers/students. The current course is referred to relatively often in the lectures, as in (15):

(15) ...let you know then, um, uh **whether we’re gonna open a section** or not.

Practical matters concerning the class take place in the ‘real world’ and not in the world of discourse. In (15), ‘we’ refers to the teachers, or even the university administration. Note, however, that the surface form of the unit suggests metadiscourse; ‘gonna’ is frequently used in previews of what is going to come in the discourse.

The complexity of ‘we’ reference is not as great as that of second person ‘you’ reference. Let me offer a few examples involving ‘you’ that further illustrate the inclusions and exclusions of the present reflexive model. Table (2) contrasts examples of the string *you can see* which are considered metadiscourse (left-hand column) and examples which are not (right-hand column).

Table 2. Examples of *you can see* functioning as metadiscourse (left) and not (right)

Specific reference: <i>you can see</i> functioning as metadiscourse	Generic reference: <i>you can see</i> not functioning as metadiscourse
<p>(16) so you can see here, a Rendille child, herding his camels... and here's a...</p> <p>(17) and that triumphal arch that you can see on this slide too...</p> <p>(18) i leave it up to you to decide, how prevalent these attitudes still are, but you can see how, basically blatant they were, back in the nineteen fifties</p>	<p>(19) so we believe it because we've seen it, in action, i mean you can see evolution happening.</p> <p>(20) Kerouac did have a, sentimental streak and that's, just that you can see that one word, that's the difference, uh says a lot about...</p>

In the metadiscourse examples, 'you' clearly refers to the audience, and the units are used to direct the audience's attention and influence their interpretation of the ongoing discourse. In the non-metadiscourse examples, the 'you' reference is generic, and the 'audience *qua* audience' criterion is not met.

The main objective of the present study is not to register the references or occurrences of individual pronouns, but to map out the discourse functions of metadiscourse units. These are described in the next section.

5. The discourse functions of metadiscourse

In dividing metadiscourse into different types, most taxonomies of metadiscourse either make quite broad distinctions (as illustrated in Table 1 above), or include types which are quite varied (e.g. ranging from the pronoun *I* counted individually as an instance of 'self mention', to transition markers such as *in addition*, to hedges such as *might*, to attitude markers such as *I am sure that.../quite extraordinary/limitations/difficulties*⁵ to full definitions such as *A plague of locusts is defined as a*

⁵ The examples of attitudes markers are from Hyland (2005:79;150).

*large, gregarious population present in at least two major regions*⁶). While broad categories may serve as a useful starting-point, it is desirable to have a more detailed analysis of the types of metadiscursive acts that are performed in discourse. In the case of personal metadiscourse, we can study ‘discourse functions’, which essentially refers to the rhetorical function that the metadiscursive expression performs in its immediate discourse context (cf. Ädel 2006:57ff).

The taxonomy of discourse functions presented here is an extended and revised version of that of Ädel (2006). The taxonomy is likely to need further revision, but it can be seen as a first attempt at creating a comprehensive taxonomy covering both written and spoken metadiscourse. Within the taxonomy, a primary distinction is made between ‘Metatext’, which is primarily oriented toward the code/discourse itself, and ‘Audience interaction’, which is primarily oriented toward the audience (see Ädel 2006:36ff). ‘Metatext’ is divided into three different categories: *Metalinguistic comments* (described in 5.1), *Discourse organisation* (described in 5.2) and *Speech act labels* (described in 5.3). ‘Audience interaction’ consists of one category, labelled *References to the audience* (described in 5.4). These categories each include three or more discourse functions, listed in Figure 1 and described below.

⁶ The example is from Hyland (2005:98). Note that Hyland adopts the interactive model of metadiscourse and that none of the examples given are considered metadiscursive here.

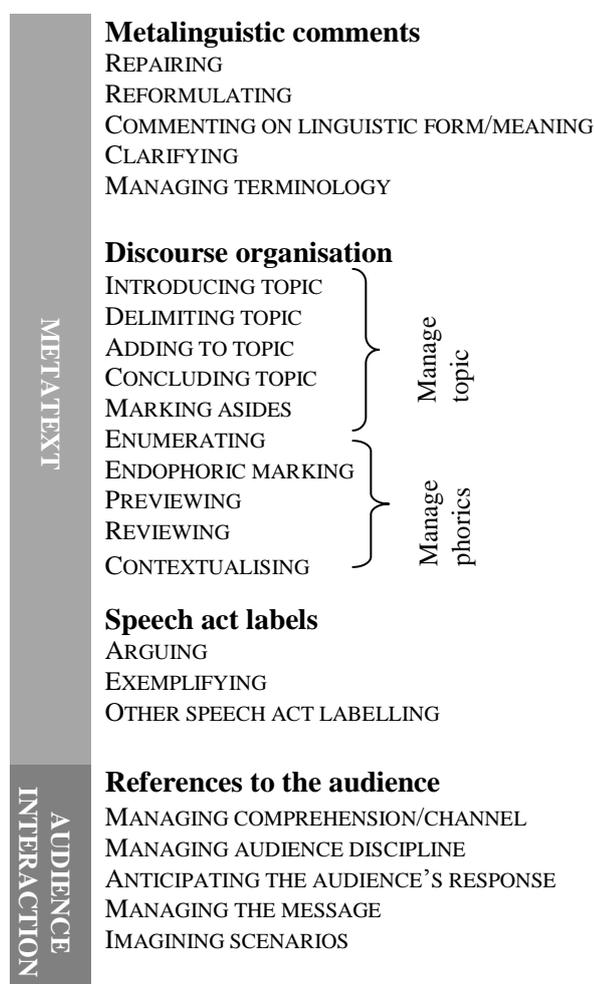


Figure 1. The subtypes and the discourse functions of the proposed taxonomy of metadiscourse

The discourse functions will be explained and exemplified in the following sections. Examples to the left-hand side are always from the spoken corpus (MICASE), while examples to the right-hand side are from the written corpus (MICUSP).

5.1 Metalinguistic comments

The category of Metatext referred to as *Metalinguistic comments* includes the discourse functions REPAIRING, REFORMULATING, COMMENTING ON LINGUISTIC FORM/MEANING, CLARIFYING and MANAGING TERMINOLOGY. REPAIRING refers to both self- and other-initiated suggestions or alterations which correct or cancel a preceding contribution. REFORMULATING refers to the offering of an alternative term or expression not because the preceding contribution was seen as erroneous (as in the case of REPAIRING), but because of the added value of expansion. COMMENTING ON LINGUISTIC FORM/MEANING includes metalinguistic references to linguistic form, word choice and/or meaning. CLARIFYING is used to spell out the addresser's intentions in order to avoid misinterpretation. CLARIFYING here does not refer to a specifically interactive function, which is why it is not classified as a type of References to the audience; it involves examples of the addresser wishing to specify what he or she is saying (or not saying) in order to avoid misunderstandings. MANAGING TERMINOLOGY typically involves giving definitions and providing terms or labels for phenomena that are talked about.

REPAIRING

- (21) they are deeply dependent on, and bound by, I'm sorry bound to the state...
- (22) uh... maybe i should've said the possibility...
- (23) i didn't mean to say that out loud

NO EXAMPLES FOUND
IN THE WRITTEN DATA

REFORMULATING

- (24) so if you'll allow me just, rephrase it a little...

- (25) either necessary truths or necessary falsehoods (or impossibilities if you want)

COMMENTING ON LINGUISTIC FORM/MEANING

- (26) now, what do we have going on in the Spanish?
- (27) did i get those right? oop, i got surprise and fear wrong ugh
- (28) i don't know exactly how to put it but...
- (29) and this, kind of, competition, if you will, between the activities...

- (30) To put it in Fregean language, we can therefore say that "statue" is one mode of presentation of...
- (31) ES can be broken down into two different 'styles,' if you will -- pessimistic and optimistic.

CLARIFYING

- (32) i'm not claiming uh that they know every...
(33) environmental things can cause mutations i'm not saying that but i'm saying that an organism...

- (34) Again, I do not mean to say that...
(35) I should note for the sake of clarity that this distinction...
(36) I will not necessarily be trying to...
(37) I am by no means trying to...; I wish simply to...

MANAGING TERMINOLOGY

- (38) ...term which we'll use quite a bit, which we might as well define now, is that if...
(39) when we use the word influence we're talking about...
(40) and by this we mean that...

- (41) When we use the term Creole in this paper, we will be using the following definition: ...
(42) Following Schipper (1989), I define earnings management as "a purposeful intervention in...
(43) it is the result of what I shall call the unreflected imposition of a culture...

5.2 Discourse organisation

Discourse organisation includes a number of discourse functions having to do with topic management: INTRODUCING TOPIC (used to open the topic); DELIMITING TOPIC (used to explicitly state how the topic is constrained); ADDING TO TOPIC (used to explicitly comment on the addition of a topic or subtopic); CONCLUDING TOPIC (used to close the topic); and MARKING ASIDES (used to open or close a 'topic sidetrack' or digression).

INTRODUCING TOPIC

- (44) what we're gonna do, in, today's lecture, is...

- (45) In this paper, I explore the relationship between suicide and individual versus social factors.

DELIMITING TOPIC

- (46) we're not gonna deal with all eight here
(47) okay we won't go into that, that's a little too much for us to consider.

- (48) ... is outside the scope of this paper, I have restricted my discussion to a few of the most common...
(49) I will focus on what the participants believe are the most pertinent actions to...

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ADDING TO TOPIC

(50) uh i should add too that that uh,
Ueda Akinari was known as a
contemporary of Motoori Norinaga

(51) We might add that their
oppressors, equally maligned by the
privileges they...

CONCLUDING TOPIC

(52) okay. so we've now talked in
detail about the first two steps
(53) we've now covered the types of
sediments...

(54) We conclude that our results are
consistent with the hypothesis that...
(55) I have attempted in this paper to
to bring research on implicit racism
together with...

MARKING ASIDES

(56) and now um, actually i want to
do a little aside here...

NO EXAMPLES FOUND
IN THE WRITTEN DATA

Discourse organisation also includes a series of discourse functions having to do with phorics⁷ management: ENUMERATING is used to show how specific parts of the discourse are ordered in relation to each other. ENDOPHORIC MARKING is used to point to a specific location in the discourse; it refers to cases in which it is not clear or relevant whether what is referred to occurs before or after the current point (unlike PREVIEWING and REVIEWING), as for example when the audience is instructed to look at a table, or turn to a specific point in a handout.⁸ PREVIEWING points forward in the discourse, while REVIEWING points backward in the discourse; these are used by the addresser to announce what is to come, or remind the audience what has already taken place, in the discourse.

ENUMERATING

(57) and we're gonna talk about
mutations first.
(58) uh we wanna deal with two
things. one thing we wanna do is deal
with, the concept of...

(60) In the following section I will
present this objection followed by...
(61) Finally then, we are left with the
eighth, and last tenet, of...
(62) I have two objections against this

⁷ Phorics point to various locations and portions in the current discourse (see Ädel 2006:101ff). They can be referred to as the road signs of discourse.

⁸ The label 'endophoric marker' is also used by Hyland (1998:443), though he uses it to include types which are referred to here as REVIEWING and PREVIEWING.

(59) um i first wanna make clear a couple of things...

proposal. First of all...

ENDOPHORIC MARKING

(63) okay so if you look at question number one, uh in your handout...

(64) However, as we can see in (5)...

(65) From these map points, we see that the proper gene order is...

PREVIEWING

(66) and we'll be coming to that

(67) and um the second question which we'll examine in the in the second hour...

(68) uh in in more technical language that we'll get to next week, they're...

(69) and by the way later in the semester we're gonna talk an awful lot about...

(70) and this is stuff that we won't get to so much right now but we...

(71) As I discuss below, the group...

(72) In Section 5, I evaluate the predictions Cole & Hermon's analysis makes with respect to...

(73) Below, I give a very brief history of the movement...

(74) although, as we will see later, other coexisting beliefs may cause...

(75) Before we examine his thoughts, let's briefly look at the background of his work.

REVIEWING

(76) uh we ended last time uh with...

(77) okay we ended the class last time talking about...

(78) ...end of last Wednesday's discussion after we had critiqued, um that article that i...

(79) so that was, again something we talked about the first day

(80) now, think back to what we were talking about earlier on in this...

(81) We have seen two different arguments purporting to show how...

(82) As we have seen, it cannot be the diagonal one, but it cannot be...

(83) During this time, as I discussed above, the rhetoric of domestic violence...

(84) Firstly, as I mentioned above in the discussion of limitations, behavioral principles...

Finally, *Organising Discourse* also includes the discourse function CONTEXTUALISING, which is used to comment on (the conditions of) the situation of writing or speaking, and thus contains traces of the production of the discourse. In this discourse function, we typically find spelled-out justifications for choices made in planning or organising the discourse.

CONTEXTUALISING

(85) okay let's uh, we're doing pretty well on time so let's...

(86) so i have entitled this lecture,

(90) Larson does not go into great detail on this and I will not do so here either.

philosophy of science...
 (87) uh, in the time we have remaining we can't um um, go on to great detail...
 (88) oh we have time to do this okay
 (89) there's still time for another question

(91) However, I have said little about how transformations within this realm take place.
 (92) I have reused the examples because both of them are cases in which the Urdu word...
 (93) In keeping with the intended scope of this project, I have decided to...

5.3 *Speech act labels*

Speech act labels includes the discourse functions ARGUING, which is used to stress the action of arguing for or against an issue; EXEMPLIFYING, which is used when explicitly introducing an example; and a general category of OTHER SPEECH ACT LABELLING for those speech acts which are not sufficiently frequent—at least not in the present data set—to have their own label (examples below include giving a hint; suggesting; mentioning; emphasising).

ARGUING

(94) it's an extremely profound point i argue cuz...
 (95) i was arguing to you that the different...

(96) I am postulating that...
 (97) I argue that there are three ways in which...
 (98) I argue that though this argument is convincing, the solutions that [X] proposes...

EXEMPLIFYING

(99) these people were, part of that group of painters uh we're talking Helen Frankenthaler Grace Hartigan.
 (100) ...that his life should be an example, um we have the biography of uh of Augustus in antiquity...

(101) I will use the embezzlement example to examine answers with respect to...

OTHER SPEECH ACT LABELLING

(102) that's the only hint i'm gonna give you for that question, um...
 (103) i wanna remind you that we do not have class meeting...
 (104) is that a question or a, thank goodness we're done, back there?
 (105) ... recycled cultural entities, okay. i will unpack that for you...

(106) , and I am suggesting that...
 (107) ...I am just mentioning it here as a possible alternative to...
 (108) Based on this cross sectional analysis, I cannot answer any of the above hypotheses.
 (109) I want to emphasize, however, that this does not mean that family is in any way...

5.4 References to the audience

The category of metadiscourse called *References to the audience*, finally, includes five discourse functions. The function of MANAGING COMPREHENSION/CHANNEL is to ensure that the addresser and addressee(s) are ‘on the same page’, to use a common metadiscursive metaphor. It is used to check or at least refer to participants’ understanding and uptake in relation to the channel. MANAGING AUDIENCE DISCIPLINE refers to cases in which the audience is directly addressed and typically instructed to do something; it may also include cases in which the audience are reprimanded or complimented for their behaviour.⁹ ANTICIPATING THE AUDIENCE’S RESPONSE pays special attention to predicting the audience’s reaction to what is said, most often by attributing statements to the audience as potential objections or counterarguments. MANAGING THE MESSAGE is typically used to emphasise the core message in what is being conveyed; as such, it tends to provide the big picture, or at least state what the addresser wishes the audience to remember or experience based on the discourse. It also refers to cases in which the addresser explicitly comments on the desired uptake. IMAGINING SCENARIOS asks the audience to see something from a specific perspective, often in a vivid and engaging fashion. It is a strategy for engaging the audience and can be thought of as a mutual thought experiment between the addresser and the addressee, taking place in the shared world of discourse rather than in the ‘real world’.

MANAGING COMPREHENSION/CHANNEL

- (110) ...more compact digital you
know what i mean?
 (111) can you guys hear?
 (112) i didn't catch that
 (113) did i answer your question?

NO EXAMPLES FOUND
 IN THE WRITTEN DATA

⁹ Note that cases in which the audience are directed to look at tables and handouts fall into the category of ENDOPHORIC MARKING, as it is more to do with organising the discourse than disciplining the audience.

MANAGING AUDIENCE DISCIPLINE

(114) alright, can i get your attention please?

(115) can we have, can we have a little bit of quiet?

(116) ...due to your, extremely, short, attention span i will now skip right to the end

NO EXAMPLES FOUND
IN THE WRITTEN DATA

ANTICIPATING THE AUDIENCE'S RESPONSE

(117) you guys'll probably, end up thinking... that i'm a twisted bastard for for uh for giving the...

(118) i don't know if that explains it

(119) You might still think that...

(120) I of course acknowledge that introspection is not always a reliable form of data analysis...

(121) You might then wonder how ontological relativity...

MANAGING THE MESSAGE

(122) that's a very powerful theory but what i want you to remember is...

(123) and what you will find, what i want you all to think about...

(124) but one, lesson you should also take away here of course is, is we've ran through, some data, that was...

(125) I hope that the reader has arrived at similar positions after reading this paper.

(126) I hope you enjoyed reviewing these materials.

(127) I have attempted to present the reader with...

IMAGINING SCENARIOS

(128) we'll give this guy a name we'll call him A. and let's say, there's...

(129) that's disinhibition. and sure you can imagine the scenario, you know if your visual cortex cells just...

(130) so suppose you're the researcher, hired by Columbia University you're just down there doing research...

(131) Suppose I say that it is wrong for me to steal some money, by which I mean I ought not...

(132) To use Hare's example, if I say that I ought to join the army...

(133) Imagine the following situation. You have to translate a foreigner's Physics. Her theory A happens to...

6. Discussion

The quantitative analysis of the two data sets revealed a great deal of shared discourse functions in speech and writing. The majority of the 23 discourse functions in the proposed taxonomy were found both in the spoken and the written data. However, there were also some salient

differences in distribution across discourse functions. Seven discrepancies between the spoken and the written data were found. Five of these can be related to differences in conditions between speech and writing, while two of them have to do with genre differences. Future analyses taking frequency information into account may reveal further discrepancies between spoken and written types of metadiscourse.

The discrepancies found to be due to differences between the conditions of prototypical speech and writing concern REPAIRING; MARKING ASIDES; CONTEXTUALISING; MANAGING COMPREHENSION/CHANNEL; and MANAGING AUDIENCE DISCIPLINE. These functions were common in the spoken data, but altogether absent from the written data. The presence of REPAIRING and MARKING ASIDES in the spoken data is attributable to the lack of time for planning and revision in real-time discourse. The cancellation of a previous element is highly unlikely to occur in written academic discourse, precisely because writers have the opportunity to edit their discourse. Although such cancellations do occur in the writing process, they are rarely visible in the final written product.¹⁰ As for MARKING ASIDES, these can occur in writing, although they appear to be uncommon in academic writing, with none found in the MICUSP data. Note that asides in written academic discourse commonly take the form of footnotes, but these require no overt linguistic marking.¹¹

Even though CONTEXTUALISING does occur in the written data, it is considerably more common in the spoken data. Despite the MICASE lectures being largely pre-planned, we still find types of metadiscourse which show the typical ad-libbing of the spoken mode in contrast to the revised and edited written mode, for example when the lecturer refers to the time available. The temporal constraints on live, spoken discourse are quite often commented on in the lectures, as in *oh we have time to do this okay* and *there's still time for another question*.

¹⁰ Similarly, note that dysfluencies, omitted from the study, are also specific to spoken discourse.

¹¹ Interestingly, research in contrastive rhetoric has shown that there may be cultural/linguistic differences in tolerance for digressions in academic prose. For example, Clyne (1987) shows that digressions are more likely to occur in German prose than Anglo-American prose.

The occurrence of MANAGING COMPREHENSION/CHANNEL and MANAGING AUDIENCE DISCIPLINE in the spoken data is attributable to the direct presence of an audience, which makes possible live exchanges, not just ‘imagined exchanges’ (cf. the other subcategories of audience-oriented metadiscourse present in the written data). This is not to say that these types could not occur in written discourse. Consider, for example, an electronic version of a paper making a statement like *If the hyperlinks do not work, copy and paste the links below*; a journal making a statement like *If you are reading the printed version of this journal you will notice a subtle change in the paper. This issue is printed on...*; or a textbook giving an instruction like *You should always read these sections carefully, even if you skim everything else*.¹²

The two discrepancies found to be due to genre differences and not differences between speech and writing concern the discourse functions ARGUING and MANAGING THE MESSAGE. Note that these discrepancies are conditioned by the nature of the data used for this study. Also, as mentioned above, the spoken lectures and the advanced student writing are not a perfect match in terms of genre. ARGUING is considerably more common in the written data, and is likely to be genre-related in the sense that academic writers typically need to argue a point crucial to their “research story”, while lecturers generally present data and facts not necessarily based on their own research. By contrast, the discourse function MANAGING THE MESSAGE is rare in the written data but quite common in the spoken data. This is likely due to genre-related factors involving power relations; specifically, lecturers often tell students what to pay special attention to, while student writers (even very advanced ones) are rarely able to present the ‘big picture’ perspective to their readers (who generally are their teachers). Written research articles, by contrast, would be more likely to involve instances of this discourse function, as they are produced by professionals who both need to and have the ability to project a knowledgeable persona.

¹² These are attested examples found on the internet.

7. Conclusion

The lumping approach taken to the spoken and written data sets has worked well; it has produced a comprehensive taxonomy of both spoken and written types of metadiscourse. Overall, the majority of the discourse functions in the taxonomy occurred in both modes, although spoken metadiscourse appears to have a greater range of discourse actions than written metadiscourse. The discrepancies found between the spoken and written data sets were not sufficiently large to warrant separate taxonomies. However, it should be stressed that only academic types of discourse have been considered; it is an empirical question whether the metadiscourse used in informal conversational speech would fit as easily into the same taxonomy. In any case, a lumping rather than a splitting approach enables easy comparison across spoken and written types of discourse, pinpointing not only how they differ, but also what they have in common.

The results of the analysis showed that differences in the conditions of speech and writing cause variation in the use of metadiscourse. The existence of constraints on the amount of time available in speech leads to less opportunity for planning and revising the discourse. The presence of an audience which is able to contribute to the discourse—as is the case in the lectures—means more opportunity for interaction between the speaker and the audience. The discourse functions REPAIRING, MARKING ASIDES and CONTEXTUALISING occurred primarily in the spoken data due to the lack of time for planning and revision in real-time discourse, while MANAGING COMPREHENSION/CHANNEL and MANAGING AUDIENCE DISCIPLINE occurred in the spoken data due to the direct presence of an audience, which makes live exchanges possible.

Another cause of variation in the use of metadiscourse was genre: the spoken lectures and the written student papers used for comparison have different purposes, audiences, and even represent somewhat different speaker-writer roles, which led to a couple of differences in the distribution of discourse functions. ARGUING was considerably more common in the written data, since academic writers typically need to put in a great deal of work on their argumentation, while lecturers generally present information not based on their own research. By contrast, MANAGING THE MESSAGE was common in the spoken data, which is likely due to power relations. Lecturers tend to take on the role of instructors,

telling students what to pay special attention to, while student writers are rarely able to present the ‘big picture’ perspective.

This qualitative study has offered a general overview of those discourse functions which academic speech and writing have in common and those for which there is a marked difference in distribution. What is needed in future research is quantitative approaches to uncover more specific differences between spoken and written metadiscourse. In fact, it would be desirable to have not only frequency information about discourse functions across modes, but also across different speaker groups (e.g. teachers versus students; professional writers versus novice writers). Mauranen’s (2001:209) hypothesis that “those in a dominant position in any speech event will use more reflexive expressions” may be further fine-tuned with access to such information.

Despite the relatively large body of data analysed for the present study (more than 13,000 examples were originally retrieved, out of which fewer than half were classified as metadiscourse), only personal metadiscourse has been considered. Future comparisons of spoken and written metadiscourse also need to include impersonal types. It is reasonable to assume that spoken genres would make greater use of personal types of metadiscourse, and, conversely, that written genres are likely to rely to a greater degree on impersonal types. A thorough study of impersonal types of metadiscourse may even result in categories being added to the taxonomy proposed here.

Since the focus of the present study has been the discourse functions of metadiscourse, the actual linguistic forms of these functions have not been dealt with. However, the phraseology of discourse functions also deserves thorough analysis. Many metadiscursive expressions are likely to play a prominent role as stored units that help in discourse processing; for example, as discourse-structuring devices (see e.g. Chaudron & Richards 1986). This brings me to my final point, which is that there is potential for the analysis of metadiscursive acts and their wording to be packaged pedagogically, especially for the benefit of non-native speakers of English. Anyone using spoken and written academic English needs to be intimately familiar with the rhetorical acts and recurrent linguistic patterns involved in metadiscourse, both for comprehension and for production.

References

- Ädel, Annelie & Ute Römer. 2009. "Research on Proficient Student Writing across Disciplines and Levels: Introducing MICUSP." Paper given at ICAME 30, Lancaster, UK, May 2009.
- Ädel, Annelie. 2008. "What uh the folks who did this survey found': Expert Attribution in Spoken Academic Lectures." *Nordic Journal of English Studies* 7, 3: 83-102.
- Ädel, Annelie. 2006. *Metadiscourse in L1 and L2 English*. Amsterdam/Philadelphia. John Benjamins.
- Ädel, Annelie & Gregory Garretson. 2006. "Citation Practices across the Disciplines: The Case of Proficient Student Writing". *Academic and Professional Communication in the 21st Century: Genres, Rhetoric and the Construction of Disciplinary Knowledge. Proceedings of the 5th International AELFE Conference*. Eds. Pérez-Llantada Auría, M. C., R. Pló Alastrué & C. P. Neumann.
- Baron, Naomi. 2005. "The Written Turn." *English Language and Linguistics* 9, 2: 359-376.
- Besnier, Niko. 1988. "The Linguistic Relationships of Spoken and Written Nukulaelae Registers." *Language* 64, 4: 707-736.
- Biber, Douglas. 1988. *Variation across Speech and Writing*. Cambridge: Cambridge University Press.
- Chafe, Wallace & Deborah Tannen. 1987. "The Relation between Written and Spoken Language." *Annual Review Anthropology* 16: 383-407.
- Chafe, Wallace. 1986. "Evidentiality in English Conversation and Academic Writing." *Evidentiality: The Linguistic Coding of Epistemology*. Eds. Chafe, W. & J. Nichols Norwood, NJ: Ablex. 261-72.
- Chafe, Wallace. 1982. "Integration and Involvement in Speaking, Writing and Oral Literature." *Spoken and Written Language: Exploring Orality and Literacy*. Ed. Tannen, D. Norwood, NJ: Ablex. 35-53.
- Chaudron, Craig & Jack C. Richards. 1986. "The Effect of Discourse Markers on the Comprehension of Lectures." *Applied Linguistics* 7: 113-127.
- Clyne, Michael. 1987. "Cultural Differences in the Organization of Academic Texts: English and German." *Journal of Pragmatics* 11: 211-247.

- Crismore, Avon. 1989. *Talking with Readers: Metadiscourse as Rhetorical Act*. New York: Peter Lang.
- Hockett, Charles. 1977. *The View from Language: Selected Essays 1948-1974*. Athens, GA: University of Georgia Press.
- Hyland, Ken. 2005. *Metadiscourse: Exploring Interaction in Writing*. London/New York: Continuum.
- Hyland, Ken. 1999. "Academic Attribution: Citation and the Construction of Disciplinary Knowledge." *Applied Linguistics* 20, 3: 341-67.
- Hyland, Ken. 1998. "Persuasion and Context: The Pragmatics of Academic Discourse." *Journal of Pragmatics* 30: 437-455.
- Ilie, Cornelia. 2003. "Discourse and Metadiscourse in Parliamentary Debates." *Journal of Language and Politics* 2, 1: 71-92.
- Jakobson, Roman. 1998. *On Language: Roman Jakobson*. Eds. Waugh, L. R. & M. Monville-Burston. Cambridge, MA & London: Harvard University Press.
- Jakobson, Roman. 1980. *The Framework of Language*. Michigan: Michigan Studies in the Humanities.
- Keller, Eric. 1979. "Gambits: Conversational Strategy Signals." *Journal of Pragmatics* 3: 219-238.
- Lucy, John. 1993. "Reflexive Language and the Human Disciplines." *Reflexive Language: Reported Speech and Metalinguistics*. Ed. Lucy, J. Cambridge: Cambridge University Press. 9-32.
- Luukka, Minna-Riitta. 1994. "Metadiscourse in Academic Texts." *Text and Talk in Professional Contexts. Selected Papers from the International Conference "Discourse and the Professions," Uppsala, 26-29 August, 1992*. Eds. Gunnarsson, B-L., P. Linell & B. Nordberg. Uppsala: ASLA, The Swedish Association of Applied Linguistics. 77-88.
- Lyons, John. 1977. *Semantics*. Vol. 1. Cambridge: Cambridge University Press.
- Markkanen, Raija, Margaret Steffensen & Avon Crismore. 1993. "Quantitative Contrastive Study of Metadiscourse: Problems in Design and Analysis of Data." *Papers and Studies in Contrastive Linguistics* 28: 137-152.
- Mauranen, Anna. 2001. "Reflexive Academic Talk: Observations from MICASE." *Corpus Linguistics in North America: Selections from the*

- 1999 *Symposium*. Eds. Simpson, R. & J. Swales. Ann Arbor, MI: University of Michigan Press. 165-178.
- Mauranen, Anna. 1993. *Cultural Differences in Academic Rhetoric: A Textlinguistic Study*. Frankfurt am Main: Peter Lang.
- Pérez-Llantada, Carmen. 2006. "Signalling Speaker's Intentions: Toward a Phraseology of Textual Metadiscourse in Academic Lecturing." *English as a Globalisation Phenomenon: Observations from a Linguistic Microcosm*. Eds. Pérez-Llantada, C. & G. R. Ferguson. Valencia: University of Valencia. 59-88.
- Roberts, Celia & Brian Street. 1998. "Spoken and Written Language." *Blackwell Handbook in Linguistics*. Ed. Coulmas, F. Oxford & Malden: Blackwell. 168-186.
- Schiffrin, Deborah. 1980. "Metatalk: Organizational and Evaluative Brackets in Discourse." *Sociological Inquiry: Language and Social Interaction* 50: 199-236.
- Simpson, Rita, Sarah Briggs, Janine Ovens, & John Swales. 1999. *The Michigan Corpus of Academic Spoken English*. Ann Arbor, MI: The Regents of the University of Michigan.
- Swales, John. 2001. "Metatalk in American Academic Talk: The Cases of 'Point' and 'Thing'." *Journal of English Linguistics* 29: 34-54.
- Thompson, Susan Elizabeth. 2003. "Text-Structuring Metadiscourse, Intonation and the Signalling of Organisation in Academic Lectures." *Journal of English for Academic Purposes* 2: 5-20.
- Vande Kopple, William J. 1988. "Metadiscourse and the Recall of Modality Markers." *Visible Language* XXII: 233-272.
- Vande Kopple, William J. 1985. "Some Exploratory Discourse on Metadiscourse." *College Composition and Communication* 26: 82-93.