Language and Discipline Perspectives
on Academic Discourse
Language and Discipline Perspectives on Academic Discourse

Edited by

Kjersti Fløttum

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This book, *Language and Discipline Perspectives on Academic Discourse*, represents the physical outcome of the symposium *Academic Voices in Contrast*, focusing on recent research within the field of academic discourse. The symposium, which took place at the University of Bergen, May 4–6 2006, was initiated and organised by the KIAP project (Norwegian abbreviation for *Cultural Identity in Academic Prose*). The main issue of KIAP has been the following: Can cultural identities be identified in academic prose, and if so, to what extent are these identities language- or discipline-specific in nature? This question has been answered through a contrastive study of a selection of linguistic features in English, French and Norwegian research articles within the disciplines of economics, linguistics and medicine (for more information, see [www.uib.no/kiap/](http://www.uib.no/kiap/) and article by Fløttum et al. in this volume).

In the KIAP project, a special focus has been put on the study of the voice(s) of the academic author—in the doubly contrastive perspective presented above. To round off the project in a suitable manner, a narrow selection of distinguished scholars were invited to participate at the symposium. They were asked to address one or several of the following issues:

- “traditional” linguistic versus contextual approaches
- interlingual differences and reasons/explanations
- interdisciplinary differences and reasons/explanations

The symposium was a great success, contributing to the advancement of academic discourse studies, currently one of the most dynamic fields within text linguistic and discourse research. I am very pleased and grateful that all the invited speakers accepted to collaborate in the writing of this book: Thank you all for your valuable contributions!

I want to give special thanks to my friends and KIAP-colleagues, Trine Dahl and Torodd Kinn, and PhD candidates Eva Thue Vold, Anje Müller Gjesdal and Anders Alvsåker Didriksen, both for intellectual discussions and practical help. Finally I would like to thank Camilla Skogseth Clausen and Mikael Ladegård for various practical and technical assistance during the symposium, the University of Bergen for financial support of the symposium and the agency Kongress & Kultur and their manager Inger Lise Ravnanger for organisational assistance.

Kjersti Fløttum
Head of the KIAP project
PART I

INTRODUCTION AND GENERAL ISSUES
1. Analyzing scientific discourse

Writers of research articles often use what might be called the ‘Ascent of Man’ trope in creating their research space. They arrange other approaches and findings so that they lead inexorably to their own, in the way that traditional views of evolution have seen the history of life as a line from amoebas to humans. This trope is effective rhetorically and also a useful mnemonic, which results in student essays full of sequences like the one for language-teaching methods: grammar-translation, audio-lingual, communicative. But Stephen Gould (1991:35) has argued that in fact “Life is a copiously branching bush...not a ladder of predictable progress.” In the same way one might suppose that in many academic areas approaches and methods profitably exist simultaneously and help to illustrate different aspects of the object of investigation.

Scientific discourse is, as Berge says in this volume, a key discourse of modernity, and its study can lead to understanding of the modern intellectual environment and empowerment of those who seek to enter it. Linguistically-oriented students of scientific discourse are lucky enough to have acquired a new major contribution in the form of the KIAP project (Fløttum et al., this volume). It enriches the ecology of the field in several ways, both empirically and theoretically. From an empirical point of view it provides a carefully constructed corpus large enough to allow comparisons of the chosen genre—the research article—across both languages and disciplines. Furthermore English is compared both with a ‘large’ and a ‘small’ language in terms of scientific publishing, and the disciplines chosen—medicine, economics, and linguistics—have been much studied in other connections, so that there is synergy with the work of others, such as Salager-Meyer on English, French and Spanish medicine (e.g., this volume), or Vassileva (2000) on linguistics in a variety of languages. The corpus has already been analyzed with statistical awareness, giving
interesting results, and will doubtless be the basis for many other investigations. But KIAP is also interesting theoretically in that it aims to apply French/Scandinavian polyphonic linguistic theory (e.g., Nølke 2001) to identify the different voices in different subcorpora. Studies of academic discourse benefit greatly from sophisticated linguistic and discourse analysis, and in the spirit of the “branching bush of life”, different approaches contribute different insights. This provides an opportunity to reflect on the methods and procedures available to linguistically-oriented studies of scientific discourse and its aims.

2. Dimensions of difference

Most such studies start from a corpus of texts delimited in some way by genre, discipline, language, users’ competence type, medium and date. Both KIAP and many of the other investigations described in this book are based on single-genre corpora of scientific/academic articles, thus focusing on a key genre of the discourse of modernity. Scientific publication involves other genres represented here like the abstract, the academic book review, the medical case study, and the conference presentation, but the discourse of science is also represented in educational genres like the lecture, textbook and seminar, and crucially in genres like the popular-science book. These genres—sakprosa in Norwegian, rather lamely translatable as “non-fiction”—make the link to the broad taxpaying public who should benefit from the activities of science, and mediate between specialist and everyday discourse. Not represented here but by now widely described are the dissertation, which is liminal between a research and an educational genre (Stålhammar 2002; Charles 2003) and the minor academic genres—‘occluded’ ones like responses to job references (Swales et al 2000), and public ones like obituaries in journals (Kresta 1996).

Studies of scientific discourse have to take account not only of generic differences, but also of disciplinary ones. KIAP examines articles from a natural science (an applied one?), a social science, and something bordering on the humanities. Many other studies of scientific discourse, including most of those in this volume, have examined one or more of these disciplines but of course there have been studies of many others—from applied mathematics (Yakhontova 2002) and computer science (Posteguillo 1999) via wildlife behaviour and conservation biology (Samraj 2002) and crash safety (Räisanen 1998), to sociology (Brett 1994) and marketing (Hemais 2001, Lindeberg 1998), to name but a few. In this volume Hyland covers eight disciplines, ‘hard’ and ‘soft’, ‘pure’ and ‘applied’, and Bondi and Tønnesson tackle the quintessentially humanistic history.

Analysis of scientific discourse may be based on a single-language corpus and describe how genres are constructed or disciplines represented in that
language. The language is inevitably often English or another of the historically dominant languages of international publication like French, German, or Russian, but many others from Swedish (Gunnarsson 1997), to Swahili (Mwansoko 2003) have been examined. In this volume Hyland and Bondi look at English, Lundquist at French (using part of the KIAP corpus), and Tonnesson and Berge at Norwegian. However a comparative approach is also frequently adopted, often contrasting the scientific discourse of English with that of another language (Russian/Ukraininan in Yakhontova 2002, Swedish in Melander et al 1997, Chinese in Bloch and Chi 1995, etc.). The majority of the writers in the present collection compare English and French, and some include Norwegian (KIAP) and Spanish (Salager-Meyer).

In English in particular, differences of competence type (native vs non-native) have been studied. Naturally enough, these studies used to be rather normative, following the commonsense idea that one should use a language the way the natives do, but the special status of English and the increasing predominance of users with non-native competence has meant that the usages of the two groups have come to be regarded as equally valid. Most writers in this volume study writers with native (as in KIAP) or unspecified competence, but Carter-Thomas and Rowley-Jolivet compare the English usage of French speakers with that of natively-competent users, and Mauranen describes some features of lingua-franca English educational discourse, in which the majority of speakers have non-native competence.

The written discourse of research has been much more widely studied than the spoken. It could be argued that this reflects its importance—it is written scientific discourse that is the shaper of modernity—but another factor is that linguistically-oriented investigations of scientific discourse are closely connected to their applications in language and writing instruction, and the need has often been for support in the written language. But on the educational (as opposed to research) side of the discourse, and in crucial conference interactions that construct the discipline, the spoken medium is dominant and is nevertheless widely considered to be under-researched. The advent of spoken corpora has made it much easier to deal with spoken academic discourse. In this volume Rowley-Jolivet draws on her corpus of medical conference presentations, contrasting them with written texts in the same discourse, and Mauranen looks at interactions in her ELFA spoken corpus.

Two other dimensions that have to be controlled in the construction of a corpus of academic discourse are date and writer gender. All the investigations in this volume are synchronic, representing more or less present-day scientific discourse, but there is a substantial diachronic literature. For example Salager-Meyer et al (2003) show that a tradition of fairly robust criticism of colleagues in medical research discourse started to change to a more guarded style in
English around 1930, but not in French, and not in Spanish until recently, perhaps under English influence. Writer gender is a dimension on which academic texts might vary, and KIAP does in fact take account of this. But corpus-based linguistic discourse analysis does not seem a productive instrument for identifying gender issues: at this level writers may be “doing science” in preference to “doing gender”.

3. Some complications

3.1 Average and variance

A very attractive feature of the results reported by KIAP is the emphasis on the variation in the individual articles within each linguistic and disciplinary class. Within any set of texts grouped by an extralinguistic category the frequency of any particular feature will vary from text to text. The average frequency for the feature is only interesting if the standard deviation is reasonably low, that is if most text members are reasonably close to the average. But even where this condition is satisfied and the averages of two sets are significantly different from one another, the texts which differ markedly from the average of their set are interesting. Do they sound odd, old-fashioned, trendy, foreign? Do they sound like texts from a particular subdiscipline? Readers need to know not only the mean value for the marker examined but also the range of values which are likely to be acceptable.

3.2 Genre

Texts which appear to belong to the same genre may not be comparable. Because different disciplines belong to partly different big-D Discourses (Gee, 1996), both the system of genres and the hierarchy among them are different in different disciplines (Swales 2004). In some the article is the lower member of a set which includes scientific letters (Hyland 2000), in others it is the faster member of a set which includes books, and in others, at least in medicine it co-exists with parallel genres like the case study (Carter-Thomas, this volume). In some disciplines virtually all writing is for peers, in others there is a lot of disciplinary writing for other audiences (Hicks 2004). Furthermore in some fields (the natural sciences) a book is a low-status publication and it is articles that count, in others (history, literary studies) books are central (Swales 2004). In traditional structuralist terms, items that occupy different structural positions in their systems cannot be comparable, and in functional terms texts with (somewhat) different purposes belong to (somewhat) different genres. There
might therefore be some risk of interpreting as a difference in the ideology of a discipline what is in fact a difference in the place of the genre compared.

3.3 Discipline

A more substantial problem might lie in the notion of discipline itself. Disciplines seem to be defined largely by the object they deal with, but within a discipline there can be very varied approaches or schools. If, for example, one adopts the distinction between cumulative nonnomothetic disciplines like most natural sciences and interpretive ideographic ones like literary criticism, one will identify a division which divides disciplines like philosophy and sociology down the middle. Similarly the modes of enquiry of molecular biology and taxonomic botany (Swales 1998) have so little in common that it would be misleading to lump them under ‘biology’. This means that one must be cautious when comparing members of a corpus that are supposed to be of different disciplines. It is striking for example, that MacDonald’s insightful descriptions (1994) of the types of sentence subjects to be found in New Historicist literary criticism cannot be generalized to other literary essays, and that Samraj (2002) found quite different genre patterns in Wildlife Behaviour and Conservation Biology. One can well imagine that articles in sociolinguistics, transformational grammar, and second language acquisition are sufficiently different in discourse and structure to make it unwise to lump them under ‘linguistics’. This means that it is important both to know whether one has selected a sample which is homogeneous with respect to school or subdiscipline, and, as mentioned above, to report on the internal homogeneity of the members of one’s categories (as the KIAP project does). Of course analysis of the statistical significance of differences will prevent internally heterogeneous categories from being incorrectly reported as different from one another. However, if the insignificance of differences is actually due to two internally homogeneous categories being confounded, failure to consider this possibility by examining the school or subdiscipline of the texts making up one’s corpus will result in missed generalizations.

An even more important problem with a linguistic approach to disciplinary discourse has been pointed out by Airey and Lunger (2006). They argue that the disciplinary discourse of physics includes not merely the spoken and written linguistic modes, but also the mathematical, the visual (graphs, etc.), the active (carrying out experiments), and the instrumental (the type of information that each instrument gives). Knowing physics, they argue, is knowing all these modes and integrating them. One can well imagine that ideographic philosophy, for example, is mainly constructed by written words, but the same is not true for all disciplines, where key aspects of the discourse may be constructed by other
modes. Linguistically-oriented analysis of scientific discourse needs to recognize that it may be comparing the whole discourse of one discipline with part of that of another and that functions performed by words in one discipline may use another mode in another.

3.4 Language

If one works with a bilingual or multilingual corpus one obvious dimension for comparison of rhetoric or discourse is between texts in different languages. The difficulty is sometimes to interpret the results. Differences between corpora of articles in different disciplines, for example can arise from at least four different sources. The articles may not be comparable, because they are intended for different audiences and the genre ecology is different in the source academic cultures (Melander et al 1997). Thus writing in social science in other languages than English may derive from a different “literature” (Hicks 2004) than writing in English, that is, it may be addressed to a less specialized audience containing more practitioners. Alternatively, different types of publication may have different weights in different academic culture. Hicks quotes figures showing that 39% of publication in Australian social sciences and humanities was as “Books, edited books, book chapters, monographs and reports, creative works and 'other'” (2004:4), while in Spain this figure was 54% and in German sociology 58% of publication took these forms. A second possible source is that different schools or subdisciplines predominate in the disciplines in question in the two language communities. A third, very significant, source, is that the linguistic resources available in the two languages may be very different. This may be at a straightforward level, like the availability in French of the multiply ambiguous generic pronoun on, in Scandinavian languages of the everyday unmarked but referentially more restricted generic man, and in English only of the stylistically marked and rather infrequent generic one. But there are also more subtle links between linguistic resources and discourse. Von Stutterheim and Lambert (2005), for example have shown that speakers of languages which mark progressive aspect (English, Spanish) on the verb tend to produce process-oriented descriptions, while in languages without grammaticalized progressive aspect parallel descriptions are goal-oriented.

Finally one can assume that some differences between scientific writing in different languages are due to cultural differences between the scientific communities involved, some of which will be characteristic only of those communities and others of the traditions of the wider community, whatever that is. Norwegian marine biologists, for example, can be expected to have some shared characteristics typical only of their group, some typical of Norwegian scientists, and others typical of anyone who has been through the Norwegian
school systems, subject to Norwegian mass media, etc. In so far as school systems, media, etc. are similar across countries with the same official language (Salager-Meyer, pers. comm.), writers with a given first language might be expected to have similar rhetorical or discoursal preferences. But it is equally likely that writers with different first languages have the same rhetorical preferences (as some of the KIAP findings reported in Fløttum et al. (2006) suggest in relation to Anglo-American and Norwegian writers), and possible that the degree of integration to metropolitan culture varies across a multi-national language. Thus British academics may essentially share the culture of their US counterparts, but one can imagine that Brazilian and continental-Portuguese academic cultures are more independent of one another.

This is where the time dimension might be of interest. Most studies show that generally speaking developments have been parallel across disciplines and languages—towards a more theoretical and less descriptive rhetoric, towards increasing specialization, and towards greater embedding in the literature (that is, more references). But these processes have proceeded at different speeds in different disciplines and scientific cultures. Consequently a final potential source of difference between texts in different languages or disciplines is that the academic cultures involved are at different stages in a common process.

4. Types of investigation

Alongside variation in the dimensions that studies investigate, there is also, of course, variation in the features that they examine and the framework in which they interpret the results. Here there may be a conflict between reliability and validity and between depth and scope which means that different approaches must co-exist and illuminate one another. Focus on linguistic features of texts may not lead to enormous increases in understanding of the texts but it produces reliable numerical results which can be built on, while focus on higher levels of discourse produces analyses that may not be replicable but are insightful. Similarly studies of many texts in many disciplines produce superficial but wide-ranging contrasts, while carefully reading oneself into a discipline leads to examination of a very small area but produces a deep characterization.

Even among studies focusing on linguistic features, the choice of features to investigate affects the rhetorical elements that can be addressed. Analyses of pronouns, modifiers, or more functionally oriented classes like hedges throw light on the ethos and pathos elements—stance, reader/relations, etc. (for example Hyland 2000), while focus on noun phrases illuminates logos (for example MacDonald 1994, Gunnarsson 1997). Focus on linguistic features may also work essentially top-down or bottom-up. Top-down, one knows from
Introductory Remarks

previous work or theory what forms are likely to be indices of the rhetorical functions one is interested in and examines their relative frequencies and placement in the parts of the corpus, while bottom-up one selects (admittedly on the basis of previous work, theory or intuitions) a form, and examines which rhetorical functions it is indexical of in the texts to be contrasted. In the present volume the KIAP corpus is used in a variety of ways. The Bergen team investigate, top-down, the frequency of a number of linguistic elements which in one way or another signal different voices in the text, enabling them to contrast polyphonic features across languages and disciplines. Grossmann and Wirth examine en fait/in fact, bottom-up, showing how the form realizes different aspects of ethos in different languages and disciplines. Lundquist also works bottom-up but looks at noun phrases with demonstrative determiners (compare Charles 2003) in French and shows how they reflect the content of their disciplines.

Hyland has adopted a top-down approach illuminated by practitioner interviews in many publications. In this volume he looks at signals of writer involvement and reader-writer interaction, adding to linguistic contrasts across disciplines interviews with discourse community members who can confirm and deepen the discourse analyst’s insights into the ethos and pathos of their disciplinary writing. Hyland ranges over many forms and many disciplines. By contrast, Rowley-Jolivet and Carter-Thomas work in a somewhat bottom-up way on one form in one discipline. They both concentrate on medical discourse and on determining the frequency and functions of one form, conditional sentences. Their familiarity with the field enables them to compare usage within this discourse of one particular form and show how it is affected by genre, mode, language, and competence-type. These differences in usage then illuminate the ways in which the dimensions affect the disciplinary discourse.

Mauranen’s paper also looks at linguistic features of texts, but in this case the texts are in spoken educational genres and the aim is to identify characteristic features of the code of academic English in environments where most speakers have non-native competence. Code features are affected not only by the discipline and the genre but also by other aspects of the communicative situation, in this case the competence-type of the interactants.

Another very common approach looks above linguistic items at the functional units that make up genres: move and steps in the tradition of Swales (1990, 2004), and more generally speech acts. It is often difficult to achieve reliable intersubjective agreement on the boundaries and even the classification of moves, but such analyses move nearer the actual acts intended by the writers of the texts examined and provide valid insights into the purposes of writers and the ideology of the discipline, particularly when supplemented by interviews. In this volume Swales and Van Bonn compare applied-linguistics abstracts in
French and English, showing how audience-type and ‘national-science’ cultural conventions are reflected even in articles in the same journal and by the same author. Salager-Meyer provides clear evidence that the strength and form of acts of negative evaluation vary across book reviews in three languages within the same discipline, presumably for a variety of linguistic and cultural reasons. Bondi takes up the KIAP theme of polyphony and looks at citations in the introduction to history articles, showing how their use reflects both the rhetoric and the content or *logos* of the discipline.

As Airey and Linder (2006) show for physics, a narrow deep analysis of one discipline moves away from linguistic expression towards the conceptual and methodological essence of the discipline, and away from reliable quantitative data towards, possibly non-replicable, valid qualitative insights. In this volume Tønnesson reports an investigation from the Norwegian *sakprosa* tradition into the multiple voices which interact to form historical discourse in a single Norwegian local history text, showing how the different voices weave a complex web to develop a broad picture. Local history is important because it is an interface between the professional historian and the local enthusiast and thus a link between the academic world and the communities it must ultimately serve. The methodology involves setting the text into the whole social and intellectual network in which it arises, with all its interactions of readers and writers, genres, publication types, political positions, etc.: something like the big-D Discourse of the discipline (Gee 1996). Analyses of this kind can only be done by a researcher with a good knowledge of the discipline and its context, combined with an awareness of rhetoric and discourse, a combination not always available in every discipline.

As we have seen, linguistically-oriented analyses of academic discourse tend to deal with indicators of *ethos* and *pathos* and not with the structure of ideas or *topoi* which are central to disciplines. I argue below that this is a reasonable task to carry out, but one must not fail to raise one’s eyes to wider issues, as Berge points out in this volume. Academic texts are important because they are powerful and formative, and studies of the rhetoric of science must eventually address the big issues of relativism, ideology, and power.

The context of current investigations of academic discourse is an increased focus on international publishing and student movement in nearly all disciplines. International publishing and study abroad have always required researchers of most nationalities to write in a foreign language, first Latin, then French, German, or English, alongside their own, but current conditions mean that only international publishing is respected in many disciplines, and that only English is acceptable. Berge points out that this means that we might eventually find ourselves in a position where knowledge circulated freely among an international English-using elite, but was not easily accessible in the other
national languages of Europe—an undemocratic and undesirable development in that academic discourse is the key source of knowledge and power in modern societies. This brings us to the final issue—what are linguistically-oriented analyses for?—which can only be touched on briefly.

5. Applications and implications

Most writers represented in this book have training in linguistics, pragmatics, rhetoric, and composition theory, and most have worked as teachers of academic writing or languages for specific purposes. Only a few have specialist training in the disciplines whose rhetoric they examine. This seems to me to point to the contribution that work of this type can most usefully make. Our potential contribution to an understanding of the logos, the ways of thinking of the disciplines, is limited by our superficial understanding of the texts. Our contribution to pure knowledge is likely to be to pragmatics or rhetoric, by testing and developing theories on the basis of new types of texts. Our contribution to scientific communication is likely to come from insights into ethos and pathos—stance, attitude, evaluation, voices—issues which are clear to us but occluded to specialists in other disciplines. Globalisation means that we often find ourselves making clear to people from other disciplines how these issues affect texts in a language foreign to them. An underlying theme of the papers in this book is that we have to balance the asymmetries of knowledge and linguistic power against the equality of rights of everyone inside and outside the academic communities.

6. References


CHAPTER TWO

CULTURAL IDENTITIES AND ACADEMIC VOICES

KJERSTI FLØTTUM, TRINE DAHL, TORODD KINN, ANJE MÜLLER GJESDAL AND EVA THUE VOLD

1. Introduction

The present paper will address the question of whether it is possible to identify cultural identities in research articles written within different disciplines and different languages through a selection of various types of linguistic manifestations. The main focus will be on person presence as realised through different academic voices, representing what we call the self- and the other-dimensions. By self we refer to the author and by other to the reader and other persons related in one way or another to the community in question. This approach is linked to a rhetorical view of scientific discourse as something which is created in a particular multivoiced communicative situation. Our aim is to show that in order to determine the complex constellations of academic voices present “behind” various obvious person manifestations, it is necessary to take into account both linguistic cotext and extralinguistic context. The choice of contextual dimensions to consider constitutes an issue closely related to our conception of cultural identity in the discipline and language perspectives.

The issue presented above is related to the Norwegian research project “Cultural Identity in Academic Prose”, abbreviated by the Norwegian acronym KIAP.1 The KIAP project started out with the objective to give substance to the commonly expressed contestation of the conception of academic discourse as neutral and objective. We wanted to identify possible cultural identities as manifested in linguistic traces of academic voices in the genre of the research article. To accomplish our objective we have taken on a doubly contrastive perspective, analysing research articles written in three languages, viz. English, French and Norwegian, and within three disciplines, viz. economics, linguistics and medicine. Our investigation has been based on an electronic corpus

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1 KIAP was financed by the Research Council of Norway during the years 2002–2006.
consisting of 450 articles (about 3,000,000 words) taken from refereed journals, in the years 1992–2003. (See www.uib.no/kiap/ and Fløttum, Dahl & Kinn 2006, both containing a comprehensive list of references relevant to the issues dealt with here; in the present paper we only mention a few).

The focus of the KIAP project has been specified through three research issues, related to the manifestation of the authors (self-dimension) in the texts, to the presence of the voices of other researchers (other-dimension) and to the presentation of the authors’ own research. This focus explains our choice of theoretical framework, which is based on a broad interpersonal and polyphonic perspective (see Nølke, Fløttum & Norén 2004), with genre theory as an overarching approach (see for example Swales 1990; Berge 2003).

In order to address the three research issues, we have selected different linguistic features which may realise the self- and the other-dimensions of person manifestation. The main features studied are the following:

- first person and indefinite subject pronouns
- verbs combined with these pronouns
- markers of epistemic modality
- argumentative connectives
- metatextual expressions
- the construction let us + infinitive
- polyphonic constructions (polemic negation and concession)
- bibliographical references

Throughout the project our main hypothesis has been that discipline is more important than language in the identification of cultural identities. Our investigations, both quantitative and qualitative, have confirmed this hypothesis in most respects: discipline wins over language. In very general terms, we may say that authors of research articles tend to write more like their disciplinary colleagues writing in other languages than like their language-community co-members writing in other disciplines—with respect to most of the features studied in KIAP.

In section 2, dealing with the notion of cultural identity, we discuss to what extent this general finding is modified by the differences revealed between disciplines and between languages. These differences allow us to portray “typical” researchers related to discipline and to language. The rest of the paper will be devoted to selected snapshots from our broad investigations leading up to the findings mentioned above. In section 3, we take a closer look at the referentially complex and rhetorically flexible pronoun ‘we’, providing room for a variety of different academic voices. In section 4, we turn to another complex pronoun as regards reference potential: the French pronoun on (‘one’). This
pronoun contributes to a remarkable play between different academic voices, representing both the self- and the other-dimension. Next, leaving direct person manifestation as realised by ‘we’ or by the French on, we narrow our perspective and look for the specific voice of the author (section 5). The focus in that section will be on more subtle traces, such as the epistemic modality marker may and its correspondences in French and Norwegian, i.e. pouvoir and kunne, respectively. In section 6, we address the multivoiced or polyphonic perspective, taking into account explicit voices as realised by the presence of bibliographical references (other-dimension) as well as implicit voices through polyphonic markers such as the negation particle not and the adverbial-concessive connective but (self- and other-dimension). This polyphonic perspective has proved particularly fruitful in that it covers traces of both author and other researchers, i.e. both the self- and the other-dimension. In our final remarks (section 7), we point to some limitations of our study. We also raise the question whether the purpose of a research article is just as much interaction as persuasion.

2. Cultural identities in academic discourse?

The heading chosen for this section relates in a very obvious way to the title of the KIAP project (cf. section 1). The question mark added indicates first and foremost that the project right from the start clearly saw the challenges implicit in defining and delimiting the concept of culture, and then secondly, that it was necessary to think carefully about how the interpretation of our linguistically based findings could be linked in a sensible–and defensible–way to the cultural settings we proposed to discuss our data in relation to. As a starting point we stated that the concept of cultural identity, however defined, should be discussed in terms of possible tendencies in linguistic practices observed in the various subcorpora (consisting of various discipline and language combinations). We have thus looked for similarities within the groups and differences between them. The settings considered to be relevant for the project were as follows (see also Dahl 2004):

(a) A national/native language-based writing culture setting, developed within the general education system, which again is part of a wider society reflecting certain values.

(b) The academic world in general, reflecting values that transcend national boundaries, such as the creation of new knowledge, precision, honouring fellow members of the academy and persuasion in a very wide sense.

(c) The discipline itself.
(d) Genre and discourse community, a setting which cannot be seen as independent from the other three, but which may still bring in other factors not subsumed under those settings.²

Possibly with the exception of setting (b), the academic world, the settings all posed problems, in different ways. Setting (a), a national/native language-based writing culture setting, represented the most serious issue. With English as one of the languages to be investigated, how can it be claimed that usage within a language functioning as a native language in countries situated across the globe might be linked to a common writing culture? The same, to a somewhat lesser extent, also applied to French. Our answer to this question has been to appeal to what we see as common ideals for Anglo-American writers that seem to be valid to a considerable extent in English language cultures, and ideals shared by the francophone world for French.

Some support for this view may be found in intercultural studies. Such studies focus primarily on meetings between cultures and have developed concepts that explain differing behaviour within an intercultural group, where cultures are ranked relative to each other according to various dimensions. Cases in point are individualism versus collectivism (e.g. Hofstede 2001) and high and low context communication (Hall & Hall 1990). Our study is not, of course, based in an intercultural setting, since we investigate the three languages separately. However, when we discuss differences in linguistic practices between the languages, it might be tempting to look to some of these interculturally based concepts. In such studies, we find for instance that many, probably the majority, of English-speaking cultures score high on individualism, something which in texts may imply authors who are visible through e.g. first person pronouns. We also find that English-speaking cultures are characterised as more low context cultures (spelling things out rather than relying on implicit information) than for instance French-speaking cultures.

When it comes to setting (c), discipline, an issue of a different nature had to be considered: disciplines that share certain features are traditionally grouped as belonging within the same branch of science. Becher and Trowler (2001) have shown that many factors may come into play when academic institutions place their various departments in the institutional landscape, and in the course of history disciplines have also been moved from one “camp” to another, both due to institutional factors as already mentioned and also due to research developments. Many disciplines, including e.g. linguistics, draw on various

² A case in point is the different rhetorical preferences of various disciplines within the genre of the research article, perhaps partly due to the epistemology of the discipline, partly to discourse community size.
other disciplines for their research. So how do our selected disciplines fit into this picture? It should be said that medicine, economics and linguistics were chosen partly for personal reasons, partly because these disciplines have been focused on by others in somewhat similar investigations. However, the long and short of it is that perhaps neither medicine nor linguistics is a typical representative of the natural sciences and the humanities respectively. Linguistics in particular is difficult to place. It shares features with all three branches of science and is sometimes classified as belonging within the social sciences. Our study has confirmed the closeness between linguistics and our social science discipline, economics, for some of our features, but not for all.

Finally, our third challenge was linked to (d), genre and discourse community. We wished to include in our study both a very large and a very small language. However, this in turn implied that the respective discourse communities would differ enormously in size, something which other researchers have pointed to as having potential consequences for the genre issue (Fredrickson & Swales 1994; Melander 1998). Can it really be posited that the Norwegian research articles represent the same genre as the English ones? An additional problem here is that for two of the disciplines studied there is only one Norwegian journal available (for the third, linguistics, there are two). We have argued that the researchers who contribute to and read these journals also publish in international journals, and hence handle the generally accepted genre format. What we find is also that there do not seem to be great differences between Norwegian and English articles with respect to the features we have investigated.

Two of the settings—(a), related to language and (c), discipline—have of course been tightly integrated in our investigation as they relate directly to the two variables of the study. Setting (b) turned out to be useful with regard to the view of scientific communication as primarily persuasive, while setting (d) contributed to our understanding of for instance the medical texts and why they differed from the texts from the other two disciplines.

As indicated in section 1, our investigation has shown that it is possible to draw up profiles which are based on discipline and also, to some extent, language, so that academic authors can be said to be members of a group. Starting with the medical author profile, we may say that such authors are generally absent from the text of the research article. The following utterance may serve as an illustration of this: "Controls showed no staining in …". We do not very often find beginnings like "We have shown by the controls undertaken …" in the medical texts. The argumentation is mostly implicit, and the research is typically presented as completed. In our characterisation of author manifestation, we have established a categorisation consisting of three main author roles: the author as researcher, as writer or text guide and as arguer (see
In this perspective, medical authors typically assume the role of researcher. Economist authors, on the other hand, are present in their texts through expressions such as “In section 3, we show that …”, but in a somewhat modest way being less directly argumentative than for instance linguists. Their argumentation is mostly implicit, and their research is being presented as conducted in the text itself, as a kind of “on-line” research. As regards author roles, economist authors manifest themselves as both researchers and writers (text guides).

It may not be surprising that linguist authors are the most clearly present of the three discipline profiles, as well as the most polemical authors. They argue explicitly through expressions such as “Contrary to the view …, we argue …”. Like economist authors, they present “on-line” research. Linguist authors, then, assume all three author roles in their texts; they are researchers, writers (text guides) as well as arguers.

When it comes to language generalisations, it is more difficult to set up uniform profiles. However, there are some typical traits that may be mentioned with respect to the features studied in KIAP. First, authors of English articles are overtly present in their texts; they are reader-friendly (guiding the readers through the text by explicit indications about what is or what will be done) and relatively polemical. English single authors tend to be 'I'-users, like in the utterance ”In this section, I will discuss …”. Authors of Norwegian articles are in many respects similar to authors of English articles in that they are present and reader-friendly. However, they seem to be more polemical, and they manifest a more collective voice. Thus, Norwegian single authors tend to be ‘we’-users—often using the inclusive ’we’ as in ‘We see that …’. In contrast, authors of French articles are relatively absent. They provide little reader guidance and are covertly polemical. French single authors tend to be ‘one’-users, like in ”On peut constater …” (‘One can observe …’).

Having presented our basic conception of the notion of cultural identity as well as some of our observations related to disciplinary and language profiles, we now turn to the study of some selected linguistic features which have contributed to the characterisation of the above-mentioned profiles.

3. The use of ‘we’

Personal pronouns are the clearest commonly used expressions of personal presence found in academic texts, and several researchers have studied the use of pronouns in such texts (e.g. Kuo 1999; Fløttum 2003a; Vassileva 2000; Hyland 2001a, b; Harwood 2005). The presence of the author(s) is above all manifested by first person pronouns, meaning ‘I’ and ‘we’.
In section 2, we portrayed the medical, the economist and the linguist author as being typically present in their texts through different kinds of author roles, viz. primarily as researchers, as writers and as arguers. These portraits are based on a systematic classification of the more than 2500 examples of the use of I and the corresponding French and Norwegian first person singular subject pronouns found in KIAP Corpus articles with only one author. The study of the use of these pronouns yielded very clear differences between the three disciplines.

But about half of the corpus articles, and the large majority of the medical articles, have more than one author and do not employ ‘I’, but rather we and corresponding forms in the other languages. These first person plural subject pronouns are also found in articles with only one author—in fact, they are more frequent than singular ‘I’ even there. There are almost 10,800 examples of ‘we’ in the KIAP Corpus.

The extent to which authors are present in their texts and the ways in which this presence is manifested are two among many aspects of cultural identity, if this is operationalised for purposes of linguistic analysis as differential tendencies in language use. To account for authorial presence in texts, however, another sense of the word identity is needed, viz. referential identity: Who does the pronoun refer to?

Ideally, in the KIAP project we wanted to extend the study of author roles to the use of the pronoun ‘we’, to find out what roles the authors assign to themselves when they use this pronoun. In order to do this, it is first necessary to determine which examples refer to the author or authors. That is, we needed to divide the set of examples into sets of relevant and irrelevant ones. This, however, turned out to be a task quite fraught with problems: It is often very hard to decide who the pronoun refers to, and it quite frequently has a double reference. Table 1 provides an overview of the referential possibilities of ‘we’ (see also Kinn 2005).

Table 1. The referential potential of ‘we’

<table>
<thead>
<tr>
<th>Exclusive ‘we’</th>
<th>Inclusive ‘we’</th>
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<tr>
<td>Non-metonymic uses</td>
<td>– authors alone</td>
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<tr>
<td></td>
<td>– authors + 3rd person(s)</td>
</tr>
<tr>
<td>Metonymic uses</td>
<td>– one author alone</td>
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As is well known, this pronoun can be used both exclusively and inclusively. Exclusive use means that the addressee is excluded, i.e. the reader of written texts. Inclusive use implies that the reader is included. Third persons may or
may not be included in either case. That is, the pronoun ‘we’ may refer to self as well as to others. In addition to the exclusive–inclusive distinction and the possibility of inclusion of third persons, ‘we’ is frequently used metonymically, for instance, inclusive ‘we’ for the reader alone. This means that not only is it necessary in a reference-based classification of examples to distinguish between exclusive and inclusive ‘we’, but it must also be determined whether third persons are referred to, and whether there is an extra metonymic layer on top of the literal reference.

We will look at some Norwegian examples of the various types. Example (1), from an economics article with more than one author, illustrates straightforwardly exclusive use where several authors refer to themselves and themselves alone. This example would clearly be relevant in a study of author roles (here the authors seem to take on the arguer role).

(1) Igjen vil vi understreke at vi ikke argumenterer imot reguleringer av dette markedet.
   (noecon01; several authors)
   ‘We want to emphasise again that we are not arguing against regulations of this market.’

In example (2), from a medical article with one author, ‘we’ seems to refer to the people at the hospital. This reference includes the author and is also an instance of exclusive ‘we’, but other third persons may well be included, and it is hard to decide whether the examples should be part of a study of author roles.

(2) Graden av reinnleggelse gir derfor ikke noe mål på kvaliteten av tilbudet vi har gitt,
   […]. (nomed29; one author)
   ‘The degree of readmittance is therefore not a measure of the quality of the services that we have offered, …’

Exclusive ‘we’ can also be used metonymically, for instance as in example (3) from an economics article with one author. Here exclusive ‘we’ is used for ‘I’, what in English is often called an authorial ‘we’. This appears to be more common in French and Norwegian than in English, but it is not uncommon in English either. Such examples should clearly be included in a study of author roles (the sequence we argue that … is an explicit manifestation of the arguer role), but it is possible that they are more appropriately treated together with examples of ‘I’, rather than other kinds of ‘we’.

(3) På bakgrunn av at […], argumenterer vi for at resultatene trekker i retning av forsiktighetsmotivert sparing. (noecon37; one author)
   ‘On the background that …, we argue that the results pull in the direction of cautiousness-motivated saving.’
As mentioned, in inclusive ‘we’, the reader is included in the reference of the pronoun. Inclusive ‘we’ is very frequently used in connection with research that is represented as proceeding in the run of the text itself—on-line, so to speak (see section 2). Example (4) shows this. Here the reader and the author are referred to as common possessors of linguistic data presented in the article. Clearly this is a kind of author presence, viz. manifesting a mixed researcher and writer role, but it cannot be regarded as being on a par with the examples of exclusive ‘we’ above.

(4) I (7b) og (7c) derimot har vi et argument som uttrykker hvem som synger, [...].  
(noling49; one author)  
‘In (7b) and (7c) [linguistic examples], on the other hand, we have an argument that expresses who is singing …’

Inclusive ‘we’ can further be expanded to include third persons, like in the economics example (5), where reference is made to the community of economists interested in the poverty problem. It is not easy to decide whether this should be part of a study of author presence.

(5) Hovedpoenget mitt er [...] å indikere hvordan vi kan benytte denne litteraturen til å belyse hvorfor fattigdomsproblemet bør løses. (noecon20; one author)  
‘My main point is … to indicate how we can use this literature to shed light on why the poverty problem ought to be solved.’

Example (6) is from a linguistics article with one author. This resembles example (4), where author and reader “have” linguistic data. In this example, however, it is arguably the single author who does the beginning (assuming the writer role by We begin with …), but the reader is taken along in the process. That is, this is a metonymic use of inclusive ‘we’ for ‘I’—unlike example (3), with exclusive ‘we’ for ‘I’.

(6) Vi begynner med to NPer inneholdende substantivet čaëk ‘te (diminutive)’ som attributt i genitiv: […]. (noling06; one author)  
‘We begin with two NPs containing the noun čaëk ‘tea (diminutive)’ as a genitival attribute: …’

Example (7), from an economics article, is also one of inclusive ‘we’ used metonymically, but this one appears to refer primarily to the reader alone. The authors are hardly reminding themselves of the facts, since they are obviously perfectly aware of them. It is the reader who is told what to remember.