Languages for Specific Purposes

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LANGUAGES FOR SPECIFIC PURPOSES

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SOME BRIEF HISTORICAL PERSPECTIVE

Thirty-five years ago, three leading British linguists published a landmark volume entitled *The linguistic sciences and language teaching* (Halliday, McIntosh and Strevens 1964). The careful wording of the title of this book was something of a clarion call; in effect, the authors promised to usher in a Brave New World of a stronger descriptive base for pedagogical materials. As far as Language for Special Purposes (LSP) is concerned, the key passage (which is well worth revisiting after all this time) is the following:

> Only the merest fraction of investigation has yet been carried out into just what parts of a conventional course in English are needed by, let us say, power station engineers in India, or police inspectors in Nigeria; even less is known about precisely what extra specialized material is required.
>
> This is one of the tasks for which linguistics must be called in. Every one of these specialized needs requires, before it can be met by appropriate teaching materials, detailed studies of restricted languages and special registers carried out on the basis of large samples of the language used by the particular persons concerned (1964:189–190).

This forthrightly-expressed agenda proved very attractive to most of the small band of LSP practitioners working in the 1960s as well as to many of the increasing numbers of others who have become involved in the LSP movement in each succeeding decade. The reasons for this attractiveness are not hard to find. The research would be descriptive (with no "literary" stylistic criticisms of the target discourses); it would deal with "normal" discourse (and not that provided by famous figures in the respective fields); it would be synchronic (with no need to look back at shaping historical forces); it would be basically textual or transcriptal (with little attempt to investigate such matters as authorial motives for linguistic choices); and it would rely on functional grammar, as primarily developed by

Halliday, and also make use of some version of the "neo-Firthian" model of contextual factors affecting language choices.

In retrospect, we can see that the great appeal of this approach lay in the fact that it seemed eminently *manageable* to early LSP practitioners, who were often working in underprivileged environments and who were also having to administer programs, develop teaching materials, and do a fair amount of teaching. First, the 1964 "manifesto" offered a simple relationship between linguistic analysis and pedagogic materials. Second, there was no strong emphasis on the need for practitioners to have any of the following types of expertise: Expert content knowledge of the fields or professions they were trying to serve; real understanding of the rhetorical evolution of the discourses central to those fields or professions; or advanced anthropological training in "fly on the wall" ethnography. Third, the ways and means of studying registers and special languages were often taught in graduate courses and were familiar territory for LSP practitioners (although less so in the United States). The early LSP practitioners were thus well equipped to carry out relatively "thin" descriptions of their target discourses. What they principally lacked was a perception of discourse itself and of the means for analyzing and exploiting it—*lacunae* that were largely rectified by the 1980s.

We can usefully view the thirty-five years of Languages for Specific Purposes since the publication of *The linguistic sciences and language teaching* as a response (even if often inadvertent) to this opening scenario. On the one hand, there has been a solid tradition of work that has continued this descriptive textual tradition, albeit with shifts in focus from language to discourse to genre, and perhaps now to activity theory (Russell 1997). For example, many of the articles in the leading journal *English for Specific Purposes* fall into this category, as do many LSP master's theses from many parts of the world, and as do two of the collections selected for the Annotated Bibliography of this review (Duszak 1997, Fortanet, *et al.* 1998).

On the other hand, all of these founding tenets have been challenged at one time or another. The challenge to a simplistic relationship between linguistic analysis and classroom activities has long been one of Widdowson's major contributions to ESP (e.g., Widdowson 1998), and perhaps it reached its fullest earlier expression in Hutchinson and Waters (1987). More recently, the debate about this relationship has re-emerged in the context of how to handle in class the new masses of linguistic data being produced by corpus linguistics (Partington 1998). The second issue (what should practitioners know) has also become more complex. Part of this issue simply derives from the massive amount of new information that is now available; for example, we now have several studies that can tell us much about the evolution of professional discourse—in economics (Gunnarson 1997a, Henderson, Dudley-Evans and Backhouse 1993), in physics (Bazerman 1988), and in the life and health sciences (Atkinson 1999a, Salager-Meyer 1997, Valle 1999). Further, new approaches to understanding professional discourse have been developed, ranging from "shadowing" individual professionals

as they go about their work (Dudley-Evans and St John 1998); to investigations into textual biographies (Swales 1998); to deeper perceptions of text construction, reception, and evaluation (Prior 1998); to various kinds of study of workplace discourse (Gunnarson, Linell and Nordberg 1997); and on to ideological critiques (Huckin 1997). However, if understanding discourse is so complexly situated in all these potentially various ways, then LSP practitioners are today forced into some kind of informal cost-benefit analysis as they struggle to come to terms with how much they need to know *before* they can offer what they have learned to their students. In this climate of competing models, exhaustive explorations, growing internationalization, and an exploding literature, it is not altogether surprising that the *simplicity* of purely textual studies based on mid-sized corpora continues to have appeal, perhaps especially in studies that attempt to compare texts in English with those of another language (Connor 1996).

LSP: A PROFESSION, A DISCIPLINE, OR NEITHER?

ESP/LSP has a rather peculiar relationship with other branches of applied linguistics. Its closest connection is certainly with discourse analysis and pragmatics (including cross-cultural pragmatics); indeed, in some sense, it can be argued that in many ways LSP *is* the prime realization of applied discourse analysis. (And this is not to disregard comparable and important developments in business and technical communication in North America and in the training of translators in Europe.) It also has good connections with language assessment and communicative language teaching. On the other hand, it has very few points of contact with second language acquisition (SLA). Indeed, in this context it is probably not a chance event that last year's *ARAL 19* had an opening section entitled "Second Language Acquisition" and a distinct second one entitled "Language Use in Professional Contexts." These two intellectual worlds thus continue to be socially constructed poles apart, perhaps because SLA continues to focus on grammar and its acquisition by young and often beginning learners. However, if these kinds of field-imposed restrictions are a cause of regret to the LSP movement, it is also true that LSP has been insufficiently concerned with how and how well its students acquire or do not acquire the communicative and literacy skills that they need. One thin strand of inquiry that has attempted to bridge this gap has been investigations into the transfer of academic skills (Johns 1997), and whether this learning is primarily articulated through content, through knowledge of a particular discourse domain (Douglas and Selinker 1994, Whyte 1995), or through the "formal" knowledge of how different genres are co-constructed and internally articulated. More work in this area would be welcome.

A major consequence of this picture is that LSP has a highly variable status as both a discipline and a profession in different parts of the world. The disjunction between ESP/LSP and language acquisition, basic FL methodology, psycholinguistics, and sociolinguistics has in the United States left very little space in graduate programs for ESP work. Apart from some individual efforts to change this situation, such as those by Peter Master and Denise Murray at San Jose State,

the lack of opportunity for professional preparation has had deleterious effects on research and program quality. Elsewhere, the situation is much rosier because of the emergence of Departments of Applied Language Studies (or close termino- logical cousins), especially in places like Australia, Brazil, Britain, Hong Kong, and Scandinavia. Although these units are not always primarily interested in ESP/LSP, they tend to be favorably disposed to its aspirations. Finland, for example, in 1999 launched a nationally-funded Ph.D. program in applied language studies to be centered at the University of Jyväskylä.

The ESL/FL field as a whole, and as seen internationally, is known for having "a long tail." In other words, there are very few senior (professorial) positions but many lecturers, adjuncts, and part-timers. This situation is also largely true of ESP/LSP where traditional forces in language, literature, and linguistics departments have operated to preserve senior posts for established areas of scholarship, and where many LSP practitioners have unstable careers as independent consultants. As a partial consequence of this, ESP/LSP has yet to establish itself as either a full profession or as clear sub-discipline in the language sciences. The import of this uncertain status for the potentially globalized language situation in the new century is hard to ascertain, but the lack of insti- tutional structure will probably be seen as more of a deficit than will its more optimistic interpretation—entrepreneurial flexibility—be believed to be an asset.

LSP AND SCIENCE, MEDICINE, AND LAW

In the spirit of Bakhtin's work on intertextuality (Bakhtin 1986), which has been so influential in studies of academic and professional discourse, I can open this short section by referring interested readers to the comprehensive surveys of the following areas in *ARAL 19*: Atkinson (1999b) on language and science; Gibbons (1999) on language and the law; and Hyden and Mishler (1999) on language and medicine. In consequence, I will be mostly concerned here with some LSP amplification and some minor updating.

As Atkinson (1999b) reveals, there have been numerous rhetorical and linguistic accounts of the contemporary scientific style, especially as it is encoded in the research article—that master academic narrative of recent decades. Montgomery (1996) offers an elegant recent synopsis:

> Scientist or not, one hears the voice of univocity, unbroken statement, the single voice of the scientific style. But how achieved? How constructed? For the most part, through a series of grammatical and syntactic strategies that attempt to depersonalize, to objectify all premises, such that they seem to achieve the plane of ahistorical essence: "recent advances have shown..."; "Analyses were performed..."; "The data, therefore, indicate...". The narrative is driven by objects, whether these be phenomena, procedures, earlier studies, evidence, or whatever (1996:13).

Meanwhile we know from the classic early laboratory studies, from Berkenkotter and Huckin (1995), from Prior's (1998) case studies, and from *The mangle of practice* (Pickering 1995), that matters on the investigative ground are much more contingent, haphazard, and interpersonally complex. Although focus on such compressed and depersonalized accounts has concentrated for good reason on methods sections, Dressen and Swales (in press) explore the suppression of field experience in *introductions* to geology articles. They show that petrologists no longer offer any descriptions of their expeditions to inhospitable settings, which are now replaced by a part-genre usually called "Geological Setting." Expertise in the locale is communicated via a condensed, expert, and conventionalized description and interpretation of the site's geological record, which has thus come to function as surrogate for the silenced voice of geological authority. In effect, their findings nicely reflect Montgomery's observation that "the narrative is driven by objects, whether these be phenomena, procedures, earlier studies, evidence, or whatever" (Montgomery, op. cit.). As Huckin trenchantly observes, "those of us interested in the cultural aspects of genre study would do well...to include textual silence in the list of features to be analysed" (Huckin 1997:76). For LSP in its more applied aspects, there would seem to be an important lesson here. If our students need various kinds of help as they acculturate into their chosen scientific or technical cultures, then they need to see that contemporary specialized texts are distanced reconstructions of mangled experience. If they do not, they will tend to believe that published authors have, in comparison to their own messy and preliminary excursions, been blessed by some unlikely combination of skill, magic, or luck to get everything seemingly so exactly right. EAP teaching and support materials might therefore do better by giving more attention to false starts, abandoned leads, and various types of revision and correction.

Although Johns (1997), Dudley-Evans and St John (1998), and Atkinson (1999a) all do a creditable job in describing and explaining the rise of genre-based approaches, they all stop short of conceptualizing genres as more than independent entities. Doubtless, taking a genre as a separable class of texts was a sensible practice in the early days of the genre movement, but pioneering studies by Bazerman (1995) on patents and by Devitt (1991) on tax accountancy communications reveal how genres are networked and reticulated. It is not clear at the moment how best to characterize these relationships, whether any kind of single characterization will work, or whether possible answers lie more in theory or in empirical investigation. At one extreme there are linear orderings such as in patent law, whereby genre X is prerequisite for the instantiation of genre Y, and Y a necessary precursor for genre Z. Here, as Bazerman argues, we could indeed envision some *system* of genres. At the other end, in the academy, the relationships among conference presentation or poster, publication, and thesis or dissertation have no necessary chronological relationship, even though there may be orderings in the sub-systems of supporting but "occluded" genres: A conference abstract is submitted, a committee reviews it, they find it acceptable and require a short summary for the program booklet, and the presentation event actually takes place. However, in academic situations in general, we might be

better advised to think of genre relationships in terms of *sets*. While both of the above cases share a requirement for the selection of specific genres, still looser arrangements are possible in which, at many decision-points, communicative action can be realized by potentially different genres. For example, a request for an academic paper may be communicated by a departmental "reprint request" card, a formal letter, an e-mail, or a phone call. One option in this situation might be to conceive of the network as consisting of *repertoires* (or menus) of genres that can be drawn upon according to circumstance.

There are, I believe, several advantages that accrue to LSP research from these expansions of the role of genre. First, as Gunnarsson (1997b) persuasively argues, we now have a powerful way of reintegrating spoken and written professional discourse. Second, we can now more easily see how genres evolve and why, and not only under the pressures of technological developments. Third, our support materials can offer a more realistic mapping of the universe of discourse for which we might be preparing a particular group of students. In ongoing efforts to increase this understanding, useful recent contributions have been published on submission letters (Swales 1996), academic book reviews (Motta-Roth 1998), recommendation letters (Precht 1998), journal acknowledgment sections (Giannoni 1998), and research grant applications (Connor and Mauranen 1999).

Last year's *ARAL* chapters on Law and Medicine only need some minor rounding out via reference to work directed at the non-native speaker. Bhatia continues to be active in the area of legal discourse, especially in comparing legal with other disciplinary texts (e.g., Bhatia 1998). Harris (1992; 1997), originally a lawyer himself, is excellent on explaining non-native speaker (NNS) difficulties in legal educational settings; Fredrickson (1996) usefully shows how broader features of legal systems have their narrow discoursal effects; and Trosberg (1997) uses modifications of speech act theory to reveal differences in legislation, contracts, and conversation. A recent study by Feak, Reinhart and Sinsheimer (in press) offers an innovative analysis of the student-written but published "Law Review Note" in American law schools. However, despite the efforts of a few individuals, this is not an area of LSP that has particularly thrived in recent years; that said, one promising development is the international project on the discourses of commercial transactions under development at the City University of Hong Kong. LSP work in medicine has been particularly thin in recent years, except for synchronic and diachronic discoursal investigations of medical research articles, which *au fond* are really part of English for Academic Purposes. One of the few recent contributions is the needs analysis of medical students in Taiwan (Chia, *et al*. 1999).

LANGUAGES FOR BUSINESS PURPOSES

In recent years, Languages for Business Purposes has become a major growth area in LSP, many of the pedagogical consequences of which are well described by Dudley-Evans and St John (1998). The causes of this growth are multiple. First, this area has been historically under-researched (especially in discourse terms) in comparison to science or technology. Second, internation-alization and the new globality (globaloney?) has drawn many more business people into bilingual and multilingual occupational settings. Third, the new business climate (wherein turbulence is the likely norm) has made it more and more obvious that traditional business language teaching materials (such as translating commercial letters) are becoming increasingly obsolete in today's multi-media business world. Fourth, the emerging recognition of an international marketplace has done something to bring together the strengths of the North American business-communications research tradition and the investigative and curricular skills and practices of a predominantly European tradition of languages for business.

Following the much-cited paper by Yates and Orlikowski (1992) on the genres of organizational communication (with its clever integration of structuration theory), genre and genre study has become a major starting point for analyzing and explaining these universes of discourse. However, much of the more successful work in this field has also adopted a number of additional (and triangulating) techniques such as linguistic auditing (Reeves and Wright 1996), interpretive ethnography (Smart 1998), familiarity analyis (Charles 1996), "fly on the wall" shadowing of business persons as they go about their daily routines (Louhiala-Salminen 1999), compuational analysis of a text corpus (Fox 1999), and user reactions to business discourses (Rogers in press). It seems clear that these innovative and comprehensive studies have largely heeded Devitt's admonition that "we need to find ways to keep genre embedded and engaged within context while also keeping our focus on learning about genre and its operations" (Devitt 1996:611). And here it is worth observing that in EAP we can often obtain some inkling of the reception-history of a particular text by seeing where it was pub-lished and how it was cited. In the business world (aside from focus-groups in advertising), we rarely have such traces. As Rogers (in press) points out, studies of genres have tended to conceptualize communicative purposes in terms of the strategies of the speakers or writers. She then goes on to argue that, at least in organizational contexts, such purposes cannot be fully understood without some sense of how those "purposes" are evaluated by their audiences. Hence, there is a need to incorporate user-based analyses; a superb example of this kind of work is Locker's recent study of responses to various forms of negative letters and the consequences of these findings for business communication textbooks and classes (Locker 1999).

Dudley-Evans and St John note a further important difference between English for academic and business purposes:

> EAP operates within a world where the fundamental concern is the acquisition of knowledge by individuals, while in EBP the purpose is not centered on the learner as an individual but as a member of a transactional world where the fundamental concern is the exchange of goods and services (1998:72).

As we gain increasing access to this (international) transactional world, a number of factors have emerged as being potentially relevant. First, Charles (1996) has convincingly shown that a key factor for the resulting discourse is whether participants are attempting to establish a new business relationship or merely consolidating a prior one. Second, the mode of communication (letter, phone, fax, e-mail, etc.) is also significant, as indeed we might expect (Akar and Louhiala-Salminen 1999, Nickerson 1998). Third, the primary power in the business is typically complementary to that of the academic setting: In the business relationship, the power relationship typically turns out to be with the potential buyer rather than the potential seller (Yli-Jokipii 1994). Fourth, the corporate or sectorial culture ("the way we do things around here") is quite different from the academic culture. This distinction is exemplified by Smart (1998) for the Federal Bank of Canada, Bilbow (1999) for a Hong Kong airline, and Nickerson (1998) for a multinational oil company. Finally, national cultural values and expectations add further variability and here much can be learned from Scollon and Scollon (1995) for east Asia, and Tebeaux (1999) for Mexico. These last efforts are both historically rich and subtle studies which salubriously steer their readers away from facile stereotyping.

Although it might be premature to conclude that Languages for Business has overtaken Language for Academic Purposes as the lead area in the field, there is equally no doubt that the quality gap has narrowed very considerably. One reason for this growth in Languages for Business has been a fine series of doctoral dissertations based (at least in part) on Scandinavian business settings, although good work has covered other geographical areas such as Akar (1998) for Turkish business communications and Barbara, *et al.* (1996) for Brazilian ones. Another contribution to this strength has come from a useful accumulation of particularistic genre analyses starting with Devitt (1991) on taxation correspondence and Bhatia (1993) on sales letters, and moving on to cover such disparate discourses as corporate mission statements (Swales and Rogers 1995), "chair talk" in business meetings (Bilbow 1999), and faxes (Akar and Louhiala-Salminen 1999). Basic research in this area positions LSP well for the new millenium, although there remain—as in EAP—significant issues with regard to what Language-for-Business-Purposes instructors need to know, how they are to be trained or helped to come to that knowledge, and how those insights can be parlayed into effective pedagogic delivery systems.

ENGLISH ENGLISH EVERYWHERE

One of the ironies of the emergent field of ESP is that its very success in catering to the needs of nonnative speakers has contributed to the overpowering position of English in today's worlds of science, scholarship, and business. Part of the irony is that those interested in comparing Anglo-American research rhetoric with comparable rhetorics in other languages are having increasing trouble locating sufficient numbers of those other-language texts. Indeed, there has been a massive conversion over the last two decades from other-language journals to English-medium ones, and, as far as I can see, almost all of the many new journals that have been springing up have an English-only submission policy. We are facing a real loss in professional registers in many national cultures with long scholarly traditions.

Crystal (1997) believes this trend to be a benign phenomenon, one inevitably linked with 'progress' and one that will lead to a more harmonious world. Others (Phillipson 1999, Swales 1997) strongly disagree with Crystal's excellently-written but ultimately triumphalist account. There are of course wider and important issues here that cannot be discussed in this chapter; nevertheless, the decline and disappearance of other major scholarly languages, as well as the stunted growth of aspiring new ones in developing countries, has at least one immediate consequence for LSP. Immense power is now concentrated in the hands of American academic gatekeepers; Wayt Gibbs (1995) calculated that, in 1994, 31 percent of all papers published in the world's leading journals emanated in the United States, and even five years later that percentage has probably moved upward. We are faced in effect with a growing linguistic and rhetorical monopoly and monoculture against which we need to consider offering 'cultural rainforest' arguments of the following type: "Insofar as rhetorical practices embody cultural thought patterns, we should encourage the maintenance of variety and diversity in academic rhetorical practices—excessive standardization may counteract innovation and creative thought by forcing them into standard forms" (Mauranen 1993:172). One small but direct way in which the field can resist this standardization is to transfer some of the resources and expertise that exists in ESP to lesser understood professional languages.

FINAL CONSIDERATIONS

One of the clearest signs that ESP/LSP has played its full part in the emergence of Applied Linguistics as a discipline is that the space constraints of a single short chapter prevent full coverage of the field. For instance, I have not been able to do full justice to the lively area that usually goes by the name of Contrastive Rhetoric, wherein scholars are now going beyond simply *showing* rhetorical differences between languages to now attempting to *explain* them. Nor have I adequately covered some other recent developments. One is the tremendous interest in corpus linguistics and its great, if uncertain, potential for LSP work of all kinds. Another is the rather belated recognition that many professional texts

have an important visual structure that parallels that of the written word (Johns 1998, Miller 1998). Yet other developments include the impact of new forms of electronic communication, the current state of the art with regard to actual LSP pedagogic materials, recent developments in translation studies, and the question of whether ESP has been overly neutral in terms of its ideology and its attitudes toward its NNS clientele (Pennycook 1997).

Overall, we can see that LSP has a number of structural problems such as weaknesses in institutional recognition and uncertain provision of professional training. Chile, for example, a great pioneer in ESP in the 1970's, has been unable to recruit a younger generation of specialists to replace its retiring experts (Horsella, personal communication). Furthermore, although LSP has, in *English for Specific Purposes*, a flagship journal, regular attempts to get it included in the Social Science Citation Index have always failed. On the positive side, it is much more of a truly international field than most areas of applied linguistics, as this chapter has tried to show and as the provenance of papers in *English for Specific Purposes* impressively demonstrates. Its alliance with and contribution to discourse analysis is also impressive, but legitimate questions can be asked about the "applied" nature of some of these investigations, since it is not always clear how the findings are to be transmuted into teaching or study materials. All in all, though, the field has responded well to the 1964 "call to arms," both in terms of the envisioned types of linguistic analyses and in greatly extending and enriching them.

ANNOTATED BIBLIOGRAPHY

[Introductory Note: For this section, I have selected only book-length items published after 1994. In so doing, I have made a conscious effort to include some volumes that represent important and relevant work done outside the ESP mainstream, both in terms of provenance and in terms of orientation.]

Bargiela-Chiappini, F. and C. Nickerson. 1999. *Writing business: Genres, media and discourses*. London: Longman.

This volume offers a strong collection of articles that show the current vibrancy of this LSP sub-field, especially in western Europe; it is a showcase of this sub-field's strengths in both research and application.

Belcher, D. and G. Braine (eds.) 1995. *Academic writing in a second language: Essays on research and pedagogy*. Norwood, NJ: Ablex.

This book is the key collection on the topic of academic writing, now nicely complemented by Candlin and Hyland (1999). The volume contains

some outstanding case studies of academic writing situations, and throughout there is a careful balance between social and cognitive demands, and between resistance to and acceptance of typified features of academic discourse.

Biber, D., S. Conrad and R. Reppen. 1998. *Corpus linguistics: Investigating language structure and use*. Cambridge: Cambridge University Press.

This book is a comprehensive and helpful introduction to a relatively new field. Of particular interest to users of this chapter will be Part II (Investigating the characteristics of varieties). The volume as a whole is strongly influenced by Biber's multi-dimensional model of register.

Candlin C. N. and K. Hyland (eds.) 1999. *Writing: Texts, processes and practices*. London: Longman.

This recent volume offers a wide variety of approaches to writing in a variety of academic and professional settings, not all of them involving non-native speakers. However, the papers cohere around a general acceptance that institutional practices and percepts strongly influence both the construction and interpretation of written texts. Another strong feature of this volume is the serious attention given to the relation between research and practice.

Dudley-Evans, T. and M. J. St John. 1998. *Developments in English for specific purposes*. Cambridge: Cambridge University Press.

As might be expected from the authors, this volume is a model of clarity and good sense. It provides a comprehensive overview of the field and, perhaps for the first time, offers a proper assimilation of work in English for academic purpose and English for business purposes, two sub-areas that traditionally have gone their rather separate ways. As a volume in the Cambridge Language Teaching Library series, it is full of textbook extracts and has a well-constructed series of tasks for student completion. It is probably the best introduction to the field now available, even if it tends to steer clear of a number of controversial topics.

Duszak, A. (ed.) 1997. *Culture and styles of academic discourse*. Berlin: Mouton de Gruyter.

This volume is an excellent contribution to the fast-growing area of contrastive rhetoric as applied to academic discourse. Part One deals with attitudes and values, Part Two with the expression of interpersonal meaning, and Part Three with variation in genres. Duszak's own contributions, both in the introductory chapter and in her paper on

"digressiveness" in Polish texts, are exceptionally good. The volume as a whole showcases recent work from Eastern Europe.

Fortanet, I., S. Posteguillo, J. C. Palmer and J. F. Coll (eds.) 1998. *Genre studies in English for academic purposes*. Castello, Spain: Universitat Jaume I.

This collection presents a strong "normal science" contribution, generally showing excellent knowledge of the literature and high-level analytic skills. Since half the contributors come from Spain, the volume demonstrates the rapid development of a strong EAP tradition in this country. The volume may not turn out to be as well known as it deserves to be because of its relatively obscure provenance.

Grabe, W. and R. B. Kaplan. 1996. *Theory and practice of writing*. London: Longman.

This is a substantial volume (of close to 500 pages) that examines all aspects of writing from an applied linguistics perspective. The chapters of greatest interest and relevance to LSP are those devoted to contrastive rhetoric, writing for professional purposes, and teaching writing at advanced levels.

Gross, A. G. and W. M. Keith (eds.) 1997. *Rhetorical hermeneutics: Invention and interpretation in the age of science*. Albany, NY: State University of New York Press.

As the title might intimate, this is a challenging volume, but one of great interest to all those seriously interested in analyzing the language of science. Among the important issues the contributors discuss are the agency of the author, whether our clever analyses of technical texts reflect authorial intent or merely our own close reading, and whether at these higher levels of interpretation we are essentially staring into the mirror of our own imagination. The volume is something of a slugfest among contemporary rhetoricians, and engaging for that additional reason, although McCloskey clearly goes over the top. The editors provide an authoritative and intriguingly self-reflexive introduction.

Gunnarsson, B-L., P. Linell and B. Nordberg (eds.) 1997. *The construction of professional discourse*. London: Longman.

This wide-ranging volume covers many fields, such as law, medicine, science, and social work. A number of the chapters provide instructive accounts of discourse in specialized communities of practice, how this discourse is socially constructed, and how it operates to validate and reify the values of the institution within which that discourse is situated.

Johns, A. M. 1997. *Text, role and context*. New York: Cambridge University Press.

Like several of its predecessors in the well-known Cambridge Applied Linguistics series, this volume is important for both its theoretical and practical contributions. Johns' chosen territory is the acquisition of academic literacy by incoming university students from disadvantaged backgrounds, and she succeeds in showing how a complex approach drawing on genre, community, and multiple modes of apprenticeship can be made to work. This book is one of few recent volumes to fully integrate research, theory, and practice.

Jordan, R. R. 1997. *English for academic purposes: A guide and resource book for teachers*. Cambridge: Cambridge University Press.

For this volume, Jordan has pulled a vast amount of material together, and manages to do so in such a way that research, pedagogical application, and practical illustration are well indicated. However, the volume somewhat over-favors British work and tends to avoid certain contemporary theoretical and ideological issues.

Louhiala-Salminen, L. 1999. *From business correspondence to message exchange: The notion of genre in business communication*. Jyväskylä, Finland: University of Jyväskylä.

This study integrates the theoretical framework of genre analysis and traditional notions of business communications. It then views the traditional business letter and the new genres of fax and e-mail through this lens. This monograph can serve as an exemplar of the quality of current studies in LSP business communications.

Miller, T. (ed.) 1997. *Functional approaches to written text: Classroom applications*. Washington: USIA. [Originally *THE Journal*. 2/3. Paris: TESOL France. 1995.]

Tom Miller of the USIA has here succeeded in pulling together a group of (mostly) leading specialists in their fields in order to demonstrate how discourse analysis can be put into practical effect. The coverage is particularly wide (reading, writing, critical discourse analysis, genre, grammar, concordancing, etc.) but the overall effect is remarkably coherent. This volume is one of the best volumes on applied discourse analysis available.

Prior, P. A. 1998. *Writing/disciplinarity: A sociohistoric account of literate activity in the academy*. Mahwah, NJ: L. Erlbaum.

> This volume is a culmination of a long series of studies conducted by the author in recent years. If Johns (1997) is concerned with the enculturation of undergraduates, Prior is concerned with that of graduates. *Inter alia*, he is able to demonstrate, via extremely detailed casework, that this process is much more complex and multi-faceted than the field had hitherto imagined. Because of his striking findings, this important work needs replicating in other fields of endeavor, such as science, engineering, and medicine.

Swales, J. M. 1998. *Other floors, other voices: A textography of a small university building*. Mahwah, NJ: L. Erlbaum.

> This is the first book by this author which is not directly concerned with LSP issues. Rather, it explores discoursal life in a small academic building, and then examines the textual lives of seven individuals, four botanists and three applied linguists. One of the book's main purposes is to re-examine—and perhaps rehabilitate—the concept of discourse community.

Valle, E. 1999. *A collective intelligence: The life sciences in the Royal Society as a scientific discourse community*. Turku, Finland: University of Turku. [Anglicana Turkuensia No 17.]

> This volume is the latest is a fine series of discourse-based studies showing the evolution of scientific discourse. Once again, we find here a complex methodology ranging from standard historical research to very fine-grained studies of citations and modes of reporting the work of others. The author concludes that while the discourses she examined have remained dialogic over the last 300 years, that dialogue has consistently become more centered on the public rather than the private domain.

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