Margrethe Petersen &
Jan Engberg (eds)

Current Trends
in LSP Research

Aims and Methods

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This volume offers an overview of new perspectives and ongoing developments in research on Language for Specific Purposes (LSP) and specialised discourse. Traditionally investigated on the basis of terminology and genre studies, the area now also draws on such diverse fields as sociolinguistics, sociology, psychology and communication studies. This widening range of perspectives increases the need for insights into and knowledge about current developments in research on LSP and specialised discourse.

The chapters included here have been selected to address this need. Based on papers presented at the *XVII European LSP Symposium,* they reflect its focus: aims and methods in current research on LSP and specialised discourse. Two chapters present the research history of the area, its current status, and emergent issues. Nine chapters exemplify methods currently applied, new aims pursued, or new aims supported by innovative methods. The methods include discourse analysis, use of specialist informants, study of multimedia texts, sociological observation, interviews, etc. The aims vary from unveiling politicians' linguistic representation of the 2008 financial meltdown over inclusion of visual representations in LSP research to clarifying the limits of lay understanding of specialised knowledge. In sum, the volume offers the reader a holistic, yet multi-faceted overview of state-of-the-art research in this area.

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Current Trends in LSP Research

Linguistic Insights

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JAN ENGBERG / MARGRETHE PETERSEN

Aims and Methods in LSP Research – Current Trends

1. Introduction

The present volume is concerned with some of the emerging aims and methods in the study of language and communication in specialised settings as they were presented at the 17th European Symposium on LSP in Aarhus in August 2009. It is thus not an attempt at documenting the breadth of the presentations at the symposium in the form of proceedings[1] but, rather, at illustrating some of the current trends in the field of LSP research that emerged during the conference.

The past couple of decades have witnessed a widening of the scope of LSP research, which is essential for the relevance of the trends indicated in this volume, from LSP in its original, literal, sense to its present-day usage. The acronym 'LSP', which is short for 'Language for Specific Purposes', stems from the time when the focus of the field was mainly on what was seen as the sublanguages, i.e., the linguistic subsystems, drawn on in the communication of experts within their fields of expertise. Further, LSP research has traditionally been concerned with the teaching of foreign (especially English) language skills to students or professionals for use in professional settings. This is exemplified in the highly influential approach of LSP-related genre analysis (cf, for example, Swales 1990, Bhatia 1993) which was mainly developed as an instrument for such language teaching. Over the years, the narrow focus has widened considerably,

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1   A fairly comprehensive overview of the contributions to the symposium, the theme of which was 'Methods and Aims – (Re-)Conceptualising LSP Research' – may be found in Heine/Engberg (2010).

resulting in books such as Swales (1998) and Bhatia (2004), in which language teaching is less prominent and general sociological aspects much more so. Bhatia even renames his approach in this context 'Critical Genre Analysis'. As noted by Laurén (1993: 9-10), the focus on language teaching has been less marked in German and Scandinavian contexts, which may be due to the Germanic term used – *Fachsprache* (German) / *fagsprog* (Danish) / *fackspråk* (Swedish) / *fagspråk* (Norwegian) – the focus of which is rather on specialised knowledge than on specialised purposes. Nevertheless, the development in LSP research in these language areas has similarly proceeded from a concern with linguistic subsystems to a broad interest in a wide range of aspects of language and communication in settings dominated by specialised knowledge.[2]

As a result of this broadened focus within the discipline and the widened variation in its objects of study, not only methods new to the field but also neighbouring disciplines with an interest in professional communication and expertise have become relevant to LSP research. Of course, such interdisciplinary influence may reasonably be expected to produce cross-fertilisation not only of methods but also of aims. The aims pursued and methods adopted by participants in the symposium may thus provide us with an idea of the role of various influences on the future development of a discipline whose overall focus is research into language and communication in specialised and professional settings. We consider the time ripe for assessing some of the possible trends in the discipline while bearing in mind its history and its characteristics. The present volume is our attempt at contributing to this goal.

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2   See Schubert (this volume) for a thorough presentation of steps and phases in
       this development.

2. Aims and methods: the organisation of this book

Below follows an overview of the chapters of this book. In order to ensure that the historic background of the field remains vivid in the reader's mind during the subsequent presentation of evidence for current trends, the prologue by Klaus Schubert (*Specialized Communication Studies: An Expanding Discipline*) is a *tour de force* through two of the disciplines which are constitutive of the present wide-ranging research into specialised professional communication: studies of LSP and studies of (professional) translation and interpreting. These disciplines and their contribution to the emergence of a new, joint discipline of Specialized Communication Studies are described from the perspective of the development of these fields as scientific disciplines, focusing on the ideas prevalent at different stages of their development. In his conclusion, Schubert proposes optimized communication as one focus for further developing the joint discipline and contributing to its continued relevance for practitioners in specialised professional communication.

Then follow three sections reflecting the relative importance of the two elements in focus, i.e., the methods applied and the aims pursued, for illustrating current, and partly novel, trends of relevance to LSP research.

The first section comprises contributions which pursue aims closely related to those traditionally associated with LSP research but which apply methods not widely used in the field. Thus, in his analysis of some of the speeches and public statements made at the outbreak of the financial crisis in 2008 by three top politicians – U.S. President George W. Bush, British Prime Minister George Brown and U.S. Treasury Secretary Henry Paulson – Richard J. Alexander (*'If money isn't loosened up, this sucker could go down.' How top politicians talk about financial crises*) investigates how specific linguistic features such as the use of personal pronouns, tense, agency and metaphors serve the purposes of 'perception management'. To this end, the author combines corpus-linguistic techniques such as the compilation of frequency counts and the production of concordances

with a critical discourse-analytic approach to his material, providing a useful basis for identifying patterns of interest to the larger discourse processes served.

In the next chapter in this section, Inger Askehave and Lise-Lotte Holmgreen (*Cultural Awareness in a Corporate Context: What Constructions of 'Culture' May Reveal*) investigate cultural awareness and sensitivity in a business organisation with headquarters in Denmark and a subsidiary in Ukraine, i.e., with cross-border activities. Adopting a social-constructivist perspective of culture, the authors have conducted semi-structured interviews with a Danish top manager and a Ukrainian middle manager working for the company in Denmark; having transcribed the interviews verbatim, they subject these to critical discourse analysis informed by both distal and proximate contexts and reveal, among other things, two significantly different perceptions of culture held by the interviewees.

In the last contribution to this section, Trine Dahl (*The Ideal Informant: On the Use of Subject Specialists in Analyses of LSP Texts*) considers some of the issues involved in supplementing traditional discourse analysis of LSP texts with the use of subject specialist informants for the purpose of testing the hypotheses and arguments developed on the basis of analyses of such texts and, thus, obtaining richer information than has traditionally been available on the discursive practices within particular disciplines. In the light of her own experience as an LSP researcher drawing on expert informants, Dahl is particularly concerned with the choices to be made in selecting informants; in deciding on survey methods; and in giving weight to contextual factors.

The second section consists of contributions which draw on neighbouring disciplines and ensuing methods not traditionally employed in the research into specialized professional communication, but which are not entirely removed from traditional approaches. The first chapter in this section by Azirah Hashim and Richard Powell (*Exploring Language Choice in Malaysian Trials and Arbitrations: Common Aims, Complementary Methods*) draws upon the sociolinguistic field of language policy concerned with the choice of language in different settings. They investigate the choice between English and Malaysian languages in courtrooms and in arbitration

settings. Apart from the results of this comparison, the contribution focuses upon the methodological considerations following from the sociolinguistic aim of the study and the special methodological problems arising from the fact that arbitration hearings are not open to the public and thus more difficult to access than the normal venues of legal communication.

The chapter by Beyza Björkman (*Investigating English as a Lingua Franca in Applied Science Education: Aims, Methods, Findings and Implications*) draws on and is a contribution to the recently emerged field of English as a Lingua Franca (ELF) as well as to research on English for Specific Purposes (ESP). Björkman reports on her study of spoken ELF in applied science education at a technical university in Sweden at which the medium of instruction is largely English. For the purpose of identifying how communicative effectiveness of spoken ELF is achieved at the morphosyntactic level, she has gathered considerable amounts of data from ELF lectures and from high-stakes ELF interaction among students from a wide variety of first language backgrounds. On the basis of a two-phase design for analysing the data – an initial phase involving extensive analysis of a large sample and a subsequent phase, in which a subset of the data is analysed intensively – Björkman identifies, among other things, a number of characteristic morphosyntactic deviations from standard use, which, nevertheless, cause no communicative disturbance. As Björkman indicates, such findings clearly have implications for ESP norms in ELF settings.

Marianne Grove Ditlevsen (*Towards a Methodological Framework for Knowledge Communication*) considers the methodological challenges which arise from adopting the aims of the knowledge communication approach proposed by Kastberg (2007 and 2010). In this approach the aim is to investigate (specialised) knowledge as co-constructed in its full complexity, including the (cognitive) construction, (textual) representation and (sociological) communication of (such) knowledge. This holistically oriented aim engenders a number of methodological challenges which Ditlevsen lays out on the basis of a presentation of considerations in connection with a specific planned project. A major challenge lies in setting up models and cognitive

frameworks which allow the researcher to simultaneously conceptualise the elements that constitute the holistic object of study.

Finally, the contribution by Simona Sangiorgi (*The 'As If Game' of Textual Hyperreality: A Case Study*) constitutes an example of adopting the aim of sociologically oriented culture studies. Her interest lies in investigating the global and local topics and values presented in brochures from theme parks in Europe and the US, i.e. in fairly different cultural settings. The main purpose is to discover underlying ideologies and perceptions and thus describe underlying intentions in the communication and construction of tourism. Furthermore, she aims at empowering readers and users of this type of communication in order for them to understand and see through the marketing attempts of the senders in such communication. Sangiorgi is interested not in the language used as such, as is the case in traditional LSP studies, but in what the language use, the discourse, may tell us about the intentions and values of the society in which the communication exists. In order to pursue this aim, she applies methods from multimodal discourse studies and from the field of Critical Discourse Analysis.

The third section includes chapters in which the authors look at the field of specialised professional communication from the point of view of a different discipline (Management Studies, Psychology). In their contribution, Martin J. Eppler, Sabrina Bresciani, Margaret Tan and Klarissa Chang (*Expanding the Boundaries of LSP Research: Using Intercultural Experiments to Examine the Role of Visual Representations in Text Comprehension and Retention*) present a study of ways of applying means of visual representations in business settings. The study thus belongs to the field of management oriented knowledge communication research. Drawing upon insights from management studies and from psychology into the conditions of the visualisation of knowledge in management settings, they set up a hypothesis-driven experiment to test whether cultural differences exist concerning the efficiency of different means of knowledge mediation. The suggested contribution to the field of LSP research lies in the special object of the study (visual means in specialised communication) and in the application of experiments in order to investigate the effect
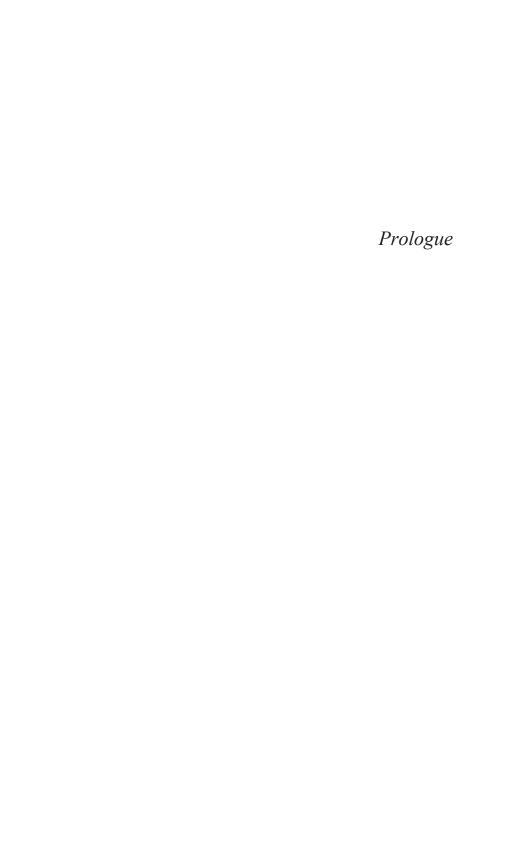
of the means of communication and thus engender insights into ways of optimizing communication.

Frank C. Keil (*The Problem of Partial Understanding*) presents insights from a range of psychological experiments on the mental representation of specialised knowledge in the minds of non-experts. He clearly indicates the existence of different levels of represented explanatory knowledge and experimentally investigates to what extent people have insight into the level of their own explanatory knowledge. The results suggest that lay people as well as experts outside their field show traits of having an Illusion of Explanatory Depth. In addition, Keil shows through another set of psychological experiments how children can distinguish between the different sets of reasoning to be expected from experts from different disciplines. Both insights are highly relevant for LSP researchers interested in optimizing the popularisation of scientific or otherwise specialised knowledge. Furthermore, the author's contribution illustrates the usefulness of applying experiments in the study of specialised knowledge.

Finally, in the epilogue to this volume, Christopher N. Candlin and Jonathan Crichton (*Emergent Themes and Research Challenges: Reconceptualising LSP*) present a programmatic argumentation for a new agenda in LSP research based on a radically different conceptualisation of the object to be studied in specialised professional communication, namely, not mainly as a linguistic activity but as a sociological practice constructing relations and meaning. Departing from assumptions of communication as a discursive practice and of the central importance of interactional elements, the authors advocate an approach in which the researcher performs detailed studies of interactions of experts or, depending on the object of interest, of experts and non-experts from a holistic perspective. Furthermore, instead of analysing such interactions in 'splendid isolation', analyses need to be performed as a joint venture between researchers and experts in the respective fields. Thus, insights into the actual structures and mechanisms of the field and results of central interest to its members are more likely to ensue.

References

Bhatia, Vijay 1993. *Analysing Genre: Language Use in Professional Settings*. London: Longman.

Bhatia, Vijay 2004. *Worlds of Written Discourse: A Genre-Based View*. London: Continuum.

Heine, Carmen / Engberg, Jan (eds) 2010. *Reconceptualising LSP: Online Proceedings of XVII European LSP Symposium 2009*. Aarhus: Aarhus School of Business, Aarhus University.

Kastberg, Peter 2007. Knowledge Communication – the Emergence of a Third Order Discipline. In Villiger, Claudia / Gerzymisch-Arbogast, Heidrun (eds) *Kommunikation in Bewegung: Multimedialer und multilingualer Wissenstransfer in der Experten-Laien-Kommunikation. Festschrift für Annely Rothkegel*. Berlin: Peter Lang, 7-24.

Kastberg, Peter 2010. Knowledge Communication – Formative Ideas and Research Impetus. *Programmatic Perspectives*, 2/1, 59-71.

Laurén, Christer 1993. Fackspråksforskningens traditioner. In Nordisk Språksekretariat (ed.), *Fagspråk i Norden*, *Nordisk Språksekretariats Rapporter*. 19. Oslo: Nordisk Språksekretariat, 9-28.

Swales, John M. 1990. *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press.

Swales, John M. 1998. *Other Floors, Other Voices: A Textography of a Small University Building*. Mahwah, NJ: Lawrence Erlbaum.

Prologue

KLAUS SCHUBERT

Specialized Communication Studies: An Expanding Discipline

1. Specialized communication studies

Scholarly disciplines emerge, develop, shift and expand. The underlying research interest may widen or narrow its perspective or move its focus to new objects, to other features of the objects or to new criteria for assessing the features. Our discipline has reached a point in its development where the old labels no longer really cover the contents. I am writing this chapter to substantiate my conviction that our discipline has by now expanded to such an extent that it should be called *Specialized Communication Studies*. I am not arguing, however, for establishing a new discipline. My point is that the discipline which we all know has changed so much that it deserves a new name. By relabelling it, we may reassure our understanding of this discipline as it stands today and as we are about to develop it onwards.

This chapter is written from a European perspective, drawing extensively on European research traditions and European sources. Indeed many of the studies I cite are in German. This may to some extent be owed to my inclination to read in my native language, but as I see it, this also mirrors the actual distribution of the research efforts and the theoretical modelling in specialized communication studies. This account elaborates on a sketch which I have given earlier (Schubert 2007: 139-207). It is inevitably coloured by my personal view of what is central and what may be considered peripheral in our field of studies.

As I understand it, a scholarly discipline is characterized by its object of study,[1] the methods by means of which it analyses the object

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1   Object: Some authors distinguish concrete, observable objects and objects of some higher order of abstraction. In German, Hoffmann (1999: 28) calls

and the perspective from which it looks upon the object.[2] The object of the discipline discussed here is specialized communication.[3] Further below, I shall suggest a definition of this object (5). Specialized communication studies emerges when two closely neighbouring disciplines – the study of languages for special purposes and translation and interpreting studies – take an interest in specialized communication. In the former, specialized communication has mainly been seen as a monolingual and in the latter as a bilingual activity. These originally distinct perspectives have in recent decades merged more and more, so that today many scholars hold an integrative perspective on monolingual and bilingual activities within specialized communication as well as activities composed of both monolingual and bilingual elements.

Figure 1 shows some of the major object fields of the two strands (cf. Schubert 2007: 135 figure 2-12). The upper half of the figure shows professional activities involving written language, the lower half oral language. The figure is further divided into three parts from left to right which mirror the three stages of specialized communication, that is production, translation and organization (Schubert 2005: 135; 2007: 132). These stages structure the object, not the theory. They are stages of the work process. The phenomenon is sometimes called the document life

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    words, sentences and texts the *Gegenstand* and specialized language the *Objekt* of the study of specialized languages. In translation and interpreting studies, Min'jar-Beloručev (1996: 5) in a similar way uses the Russian terms *predmet* for the concrete and *ob''ekt* for the abstract object. I do not try to use a parallel pair of terms in English. Since the abstract objects are a first step of the individual author's or school's theorizing and modelling, I prefer to speak of *elements of a model*, when referring to the abstract, and to reserve the term *object* for the concrete sense.

2   Prerequisites of a discipline: By contrast to this view, for Wilss (1996: 16) the only criterion for the status of a discipline appears to be an exclusive object. On this basis, Wilss (1997: 41) diagnoses that translation and interpreting studies does not possess an autonomous status and accordingly is not a discipline of its own. Thome (2004) refutes this in a thoroughly argued analysis.

3   Specialized vs technical communication: The English term *technical communication* is synonymous with *specialized communication*, when the ambiguous adjective *technical* is taken in its broader sense (referring to any speciality), whereas technical communication is part of specialized communication when *technical* is understood in its narrower sense (referring to technology and engineering). In this chapter, I use the narrower reading (cf. Schubert 2010).

cycle. However, the concept of three stages is wider, since it is not the case that documents are involved in all relevant communicative acts.[4]

It should be noted, however, that figure 1 mentions only those fields of professional practice which have an established name. For instance, in the left part of the figure, 'technical writing' is given as an activity of the production stage involving written language. Of course, there are more activities than just technical writing which have the features 'written language' and 'production stage'. But technical writing is the only one among them which has an established name as a field of professional work.

Fig. 1: Specialized communication in the object fields of the study of languages for specific purposes and translation and interpreting studies.

Figure 1 illustrates that specialized communication studies addresses the entire range of objects of study of languages for special purposes

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4   "A document is a fixed oral or written text, including nonverbal components, which can be reread or reheard at any time" (Schubert/Link 2008: 140; for discussion cf. Schubert 2007: 6-8).

but only a particular section of the object range of translation studies. The researchers active in one of the two disciplines may not have immediately realized that they were investigating the same object, since they approached it with different perspectives. It should also be borne in mind that figure 1 depicts the object field but is not in itself meant as a theoretical model of this discipline.

It is common to divide the development of scholarly disciplines into a prescientific and a scientific period. When one wishes to get a picture of what was thought and written about the object of study in the prescientific period, the main source of knowledge is practitioners' reflection. I use this label as shorthand for all kinds of publications in which the practical work or its workpieces[5] are discussed by authors who either have hands-on or indirect experience of the work or who relate the experience of others. Although the model would become nicer if one phase is allowed to end when the next one begins, reality is different. When a discipline comes into existence at the beginning of the scientific period, the prescientific sources do not suddenly dry out. Rather, when scientific research and scholarly publications begin to appear, all kinds of practitioners' reflections may well continue to appear. In the fields relevant here, such reflective publications do indeed appear along with the activities in the academic realm. I shall not here pursue the interesting question as to what extent the authors of both sides take note of each others' publications.

Since specialized communication studies has arisen mainly from two precursor disciplines, I shall deal with the development in two separate sections. Section 2. discusses the criteria used for structuring the development of the disciplines. Section 3. is dedicated to the study of languages for special purposes and Section 4. to translation and interpreting studies. The recent and future, integrative development is then discussed in Section 5.

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5   Workpiece: I use this term for the text or document created or edited in the communicative acts investigated, because large parts of specialized communication, especially in the technical sphere, are concerned with texts or documents dealing with engines, devices, software systems, drugs, procedures etc. for which I reserve the word *product*, distinguishing, where such precision is needed, between *product* and *service*.

2. Structuring criteria

Specialized communication studies is a single discipline – at least today. It has its roots in the two precursor disciplines which have developed separately over a longer stretch of decades and which, for some parts, continue to exist in separation. To account for this development in a perspicuous way, it is necessary to choose one or more criteria by means of which the abundance of research approaches, schools and individual studies can be seen as a structured whole. At least three such criteria are at hand which are not mutually exclusive but complementary. In this study I shall use two.

The first criterion is that of the autonomy of the discipline. I have discussed it elsewhere (Schubert 2007: 347; 2009b: 17), subdividing the scientific period into three stages called

- the stage of emerging scholarly interest
- the stage of an interdiscipline
- the stage of an integrative discipline.

To keep this account simple, I shall not discuss these stages here.

The second criterion is that of the perspective from which researchers view their object of study. This is a suitable structuring criterion, since both the study of languages for special purposes and translation and interpreting studies set off with a relatively narrow view on their object which widens in the course of time. As the discussion below will show, the two disciplines broaden their perspective more or less in pace with each other. This parallelism is owed to the fact that the disciplines have kept a common ground in linguistics; more precisely, in applied linguistics, where a similar widening of the perspective can be observed.

The third criterion is concerned with the theorizing about the object of study. The primary purpose of a scholarly analysis of a certain object field is to build a theoretical model which may then become the basis of further reasoning. In specialized communication studies and its precursors, at virtually any given point in time a number of ideas can be observed which prevail in the models favoured at

that time. I call these the *prevalent ideas*. A very similar concept has been put forward by Chesterman (1997: 7-14), who calls them 'su-permemes'.[6]

In this chapter, I use the second and the third criteria.

3. The study of languages for special purposes

It is not trivial to determine when exactly the transition from the pre-scientific to the scientific period takes place. The authors who discuss early interest in the languages for special purposes give widely diverg-ing dates for the beginning. This is owed to different judgements as to whether a certain publication should be seen as a practitioner's reflec-tion or as a genuinely scholarly contribution. Von Hahn (1983: 7-12) cites sources from as early as antiquity, while Picht (1996: 28-29) refers to writings from the 16th century onwards. According to Arntz/Picht/Mayer (2002/2009: 3), these reflecting works did not as-sume a scholarly nature until the mid-19th century, whereas in the view of Roelcke (1999/2010: 14) the study of languages for special purposes began in the 1950s. The latter opinion is interesting in our context, since it would let the study of languages for special purposes start more or less at the same time as translation studies. However, this late date lies after the peak of the short-lived, yet relevant school of the 1930s, called *Wirtschaftslinguistik*.[7] I therefore tend to follow Arntz, Picht and Mayer's opinion.

In my analysis, in the study of languages for special purposes four prevalent ideas can be identified (Schubert 2007: 142):

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6   Supermemes: The term *meme* was suggested by Dawkins (1976: 206) as a parallel to *gene*. Memes are cultural phenomena such as ideas, techniques etc. which in Dawkins' view spread in a way similar to how genes are transmitted in heredity. Chesterman (1997: 7-14) transposes the term into translation and interpreting studies. He distinguishes memes of different degrees of general-ity, introducing for the most general ones the term *supermeme*. Kastberg (2010) uses the term *formative ideas* in much the same sense.

7   Wirtschaftslinguistik: Drozd (1978), Koch (1997), Picht (1998).

- *Specificity of specialized communication*: The idea that specialized communication can be distinguished from other types of communication by observable characteristics.
- *Optimization*: The idea that it is purposeful to improve specialized communication by deliberate interference.
- *Culture*: The idea that the content, language, appearance and situative embedding of specialized communication are conditioned by cultural factors.
- *Cognition*: The idea that specialized communication has the purpose of expliciting, imparting and constructing knowledge.

The concept of prevalent ideas, the third of the above criteria, derives from an analysis of the theories which are developed within the discipline. In the following paragraphs I first apply the second criterion, the concept of the perspective, and point out the prevalent ideas in the course of the discussion.

The study of languages for special purposes develops from a rather narrow perspective to one that continuously widens over time. Four stages can be distinguished (Schubert 2007: 141):

- the terminological stage
- the system-oriented stage
- the text-linguistic stage
- the cognitive-communicative stage

Kalverkämper (1998b: 48) divides the same development into six levels. Roelcke (1999/2010: 14) uses three *Fachsprachenkonzeptionen* 'concepts of language for special purposes' for the same purpose.

3.1. The terminological stage

The terminological stage starts with an interest in the word (Niederhauser 1996: 40-41; Hoffmann 1998: 157; Kalverkämper 1998b: 48). This focus is already clearly apparent in the prescientific period, since the word is the most obvious unit of language even for linguistically untrained observers. As far as specialized communication is concerned, the earliest research interest is accordingly centred on the

term. Many early studies deal with the terms used in crafts, trades and other specialities.

At this stage, an interesting pair of impulses initiates a new development which is still today of primary importance both for the professional field of specialized communication and for its scholarly reflection. In the period after the First World War, industry expands rapidly and the need for standardization becomes more and more urgent. At the same time, planned languages are making progress. Industrial standardization is essentially an attempt to make the actors in engineering agree on a great number of detailed decisions in product development from which they all profit. The construction of planned languages is an attempt to devise a means of communication and let those who need to communicate agree upon this means. The first idea improves objects, the second human behaviour. When actors who were able to combine the two stimuli entered the scene, a new impetus for our discipline arose. This was the idea of *optimization*, which was to become one of the prevalent ideas in specialized communication studies.

The leading figure among those who brought the two optimizing ideas together was Wüster. He was an industrialist and at the same time an active interlinguist, i.e. a specialist in the then emerging discipline dealing with optimized international communication (Blanke 1985: 17), with planned languages as its central object.[8] Wüster's work gave rise to the discipline of terminology and its application in terminography. His fundamental publications are widely known (e.g. Wüster 1931/1966; 1979/1991), but it is not always remembered that a great deal of the basic principles of linguistic optimization and of the systematics of Wüster's suggestions for thoroughly constructed concept systems and terminologies is directly derived from his profound knowledge of Esperanto,[9] a planned language particularly notable for its extremely regular, productive and versatile word formation (Schubert 1989; 1993).

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8   Interlinguistics: Overviews: Blanke (1985), Kuznecov (1987), Sakaguchi (1998). Edited volumes: Haupenthal (1976), Schubert/Maxwell (1989), Schubert (2001), Tonkin (2003), Blanke (2006).

9   Esperanto as a structuring principle: The enormously regular word formation of Esperanto is mirrored among other things in the symbols Wüster uses for word classes (Wüster 1931/1966: 14). The letters *i*, *o*, *a* and *e*, used by Wüster as labels are the endings of Esperanto verbs (infinitives), nouns, adjectives and ad-

The aim of terminological work is to define concepts and to make explicit the semantic relations among them in concept systems with a view to standardizing and thereby optimizing specialized communication. The prevalent idea of the *specificity of specialized communication* is obvious especially in standardization. This idea implies an attempt at making terms unambiguous. Though unambiguity is ultimately impossible,[10] the striving for high definitional precision is characteristic of terminology. Thus, terminology has a clearly prescriptive purpose.

3.2. The system-oriented stage

Terms may be characteristic of languages for special purposes, but they are not their only feature. Widening its perspective to the sentence, the discipline takes an interest in specific collocations and phrasemes and in specific syntactic structures in general. This directs the focus towards the language system as a whole, so that it is now that the system-oriented stage begins. This step beyond terminology is already contained in Wüster's ground-breaking work. Wüster dedicates a long chapter to the question of an international language. The fact that this is meant as a natural step from the word to the sentence level can already be understood from the title of this chapter: 'Satzfähiges internationales Benennungssystem (internationale Sprache)' [system of international terms capable of forming sentences (international language)] (Wüster 1931/1966: 277).

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verbs, respectively. In this, Wüster is prior to Smirnov-Trojanskij, who chooses Esperanto function morphemes as interlingual grammatical markers in his mechanical translation system (Schubert 2007: 164 fn. 249), as well as to Tesnière (1959/1982: 64), who uses them much in Wüster's way. Apart from this, Wüster (1931/1966) throughout his book amply discusses the use of Esperanto and other planned languages in terminology and linguistic optimization.

10   Unambiguity of concepts: From a theoretical point of view, semantic unambiguity is impossible, since every concept can be further divided. In addition, semantic precision in one language does not remove the problems of translational ambiguity which specialized communication has to confront very frequently and which forms arguably the most important obstacle to fully automated translation. On the unambiguity of terms, cf. Gardt (1998: 35) and the sources cited by him.

Having widened its perspective to the sentence as a basic unit and to the language system as a primary research focus, the discipline at this stage discusses new issues. One is the differences between the common language and the language for special purposes. In hindsight, the result of this lengthy debate in my view is that it is widely acknowledged that there is no sharp borderline between common and special language, but that, along with subjects of different degrees of specificity, there are texts of different degrees of speciality (cf. e.g. Kalverkämper 1996c: 135-136). As for the equally much discussed question of whether, within a given language, there is a single language for all special purposes or a number of languages each for its particular speciality, the consensus appears to be the latter view.

At the system-oriented stage, Hoffmann offers a widely used definition:

> Fachsprache – das ist die Gesamtheit aller sprachlichen Mittel, die in einem fachlich begrenzbaren Kommunikationsbereich verwendet werden, um die Verständigung zwischen den in diesem Bereich tätigen Menschen zu gewährleisten. (Hoffmann 1976: 170)[11]

> [Language for special purposes – that is the entirety of all linguistic means used in communicative settings within a speciality in order to maintain the communication among the people active in this setting.]

In these years, Hoffmann's definition is accepted by very many, but there is also criticism (e.g. Roelcke 1999/2010: 15). It is applicable to many research interests by its clarity: The definition clearly defines the language for special purposes by means of the situational setting and leaves the linguistic properties open for analysis. Of course, such an approach is an early herald of the interest for the pragmatic factors, which is subsequently to grow at the cognitive-communicative stage.

Hoffmann defines language for special purposes as a means of communication *among* those active in a certain speciality. Other schol-

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11   Hoffmann: Most often, the second (Berlin 1984, Tübingen 1985) or the third edition (Berlin 1987) of Hoffmann's *Kommunikationsmittel Fachsprache* are cited. The later editions are considerably shorter than the first, but include a new chapter on text linguistics.

ars later widen the perspective to include not only the internal communication among experts but also that between experts and laymen.

3.3. The text-linguistic stage

The next time the perspective is widened is when researchers go a step further and focus on the text as the main unit of analysis. The main research questions addressed at this stage include the cohesion and coherence of texts, text types, comprehensibility and ways of viewing a text as an utterance. The development of the discipline in four stages closely follows the general development of applied linguistics. This is particularly obvious at the text-linguistic stage, when the issues discussed in the study of languages for special purposes are virtually the same as in general applied linguistics. The difference lies in the objects of study, which are specialized texts in the one discipline and general texts in the larger one.

The cohesion and coherence of specialized texts is a common topic in this time. Cohesion is an interesting hook for automated text analysis in computational linguistics, while coherence, less easily detectable, shows the semantic and pragmatic connections which are relevant for many applications in languages for special purposes, not least in the fragmented documents (hypertexts and the like) which begin to appear at this stage. Coherence in texts may be represented by means of relator-argument structures or isotopies or theme-rheme organizations. The analysis of coherence in texts starts as a continuation of what has been common in grammar, syntax in particular, and onto the text level. Since the structure of texts is not so overtly marked by grammatical means, however, this research interest step by step introduces categories which lie on the border or fully outside the realm of linguistics. This tendency becomes much stronger at the cognitive-communicative stage.

The study of languages for special purposes takes great interest in classifying specialized texts into text types. A common approach is to axiomatically choose the classifying features of texts from the situational, pragmatic and other extralinguistic characteristics and subsequently to investigate the common linguistic features displayed by the

texts found in the text types thus defined. Like coherence analysis, this field of study also quite easily gives rise to communicative questions, for example when the texts are not only analysed as to their linguistic features but also as to the speech acts expressed in them. In this way, even here the cognitive-communicative stage is foreboded.

Another topic which catches the attention at this stage is the comprehensibility of texts. Three models are particularly noteworthy. The Hamburg comprehensibility model by Langer, Schulz von Thun and Tausch[12] is developed on psychological grounds; it deals originally with school textbooks and is evaluative. Later, the model is applied to other text types, including specialized documents, and, leaving the evaluative approach, gives rise to a series of practical how-to guides. It fails to make use of linguistic knowledge on texts and generally lacks a broader theoretical basis. Despite these shortcomings, the model is still today very commonly used in academic education and professional practice in technical writing, particularly in the German-speaking countries. The second comprehensibility model is Groeben's.[13] It is much more solidly founded in linguistics, communication studies and psychology and gives evaluative comprehensibility criteria. From this work, Groeben went on to psychologically oriented research into reading. The model is less known than the Hamburg model and hardly ever used in practice. Both models were developed more or less simultaneously at the beginning of the 1970s, and for today's reader it appears obvious that there must be some connection. Both models analyse the comprehensibility of texts by virtually the same four dimensions, which are, translated here from the Hamburg wordings, *simplicity*, *structure*, *brevity/clarity* and *stimulating accessories*. The third model appears nearly three decades later. Göpferich compares and criticizes the two models (Göpferich 2002: 136-153) and develops a third one, the Karlsruhe comprehensibility concept.[14] By contrast to the earlier models, the Karlsruhe concept is

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12 Hamburg comprehensibility model: Langer/Schulz von Thun/Tausch (1974/ 2002); cf. Christmann/Groeben (1996: 173), Hennig/Langer (1999).
13 Groeben's comprehensibility model: Groeben (1972/1978; 1982), Christmann/Groeben (1996; 1999).
14 Karlsruhe comprehensibility concept: Göpferich (2001; 2002: 154-188; 2009). This model is part of the cognitive-communicative stage. I treat it here, because it is so immediately linked to the two models of the 1970s.

clearly aimed at specialized communication, and at technical writing in particular. This model is evaluative as well. Its novelty lies in the pragmatic situational factors, such as the assignment brief, standards and legal stipulations, and the document medium, by means of which the model is clearly positioned in a professional setting.

The analysis of specialized texts as utterances widens the discipline's perspective towards sociology and sociolinguistics and also makes use of psychological insights. Researchers are now interested in the communicative situation and relationships between the agents. The symmetry or asymmetry in the agents' professional and social status, their roles as experts or laymen in a given speciality, is taken into account. At this stage, the distinction between intra- and extra-speciality communication arises.

3.4. The cognitive-communicative stage

Again, the perspective of the discipline is widened. The interest for the communicative situation, its features and its agents comes more and more to the foreground. In the mid-1990s, the focus, which had been on the means of communication, now shifts to communication itself and to the agents' communicative activity. It is from now on that the old label of a discipline merely interested in the linguistic side of communication becomes outdated. The discipline begins to incorporate elements of communication studies.[15] At this last stage to date, an increasing interest can be noted which is concerned with the function and impact of the communicative act, so that now concepts such as the writing process and other forms of communicative activity as well as knowledge, the imparting and the construction of knowledge, and the cultural conditioning of communication come into focus.

This shift in focus is mirrored in the definitions suggested by researchers. While, at the previous stages, the concept of language for special purposes is defined, the object of the definitions is now spe-

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15   Focus shift to specialized communication: Baumann (1996), Budin (1996: 14-16), Kalverkämper (1996: 150; 1998c: 33), Picht (1996: 33-34).

cialized communication. Baumann (1992: 3 fn. 5) and Picht (1996: 44) give such definitions. Hoffmann suggests the following:[16]

> *Fachkommunikation* ist die von außen oder von innen motivierte bzw. stimu-lierte, auf fachliche Ereignisse oder Ereignisabfolgen gerichtete Exteriorisie-rung und Interiorisierung von Kenntnissystemen und kognitiven Prozessen, die zur Veränderung der Kenntnissysteme beim einzelnen Fachmann und in ganzen Gemeinschaften von Fachleuten führen. (Hoffmann 1993: 614)

> [*Specialized communication* is the exteriorization and interiorization of knowledge systems and cognitive processes, motivated or stimulated externally or internally and dealing with specialized events or sequences of events, which cause a change in the knowledge systems of a single expert or a community of experts.]

Here, the concept of *cognition* can be seen as one of the ideas to be-come prevalent at this time. The focus is on the relation between com-munication and cognition (Hoffmann 1993: 599). In my view, the central insight is that knowledge is constructed and utilized by means of (mostly linguistic) communication (Kalverkämper 1998a: 17) and that communication by means of language is thus the connector between the phenomena of the world and their mental image (Kalverkämper 1998c: 25). *Competence* is a central concept in this discussion, and the research field of knowledge communication arises as a continuation of this line of thought.[17]

The sociolinguistic approach in the research can be seen from an increased interest in issues of the social position of the agents par-ticipating in the communicative event that is investigated. A rough distinction is made between three layers, viz. researchers, experts and laymen. Not all researchers agree on including scholarly communica-tion in specialized communication. Others remember suggestions from an earlier stage of the discipline, for instance the five-layered system proposed by Hoffmann (1976: 184-194).

As the situation becomes more important in the models sug-gested at this stage, more effort is invested in defining the concept of

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16   Hoffmann's theory: A very dense and complex, but in my view enlightening sum-mary of Hoffmann's theoretical stance at this stage is found in Hoffmann (1999).
17   Knowledge communication: Engberg (2007; 2010), Rothkegel (2008; 2010: 76).