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ABSTRACT

This collection of articles deals with research on writing, didactics, mother-tongue writing (sociocognitive perspectives, writing profiles, writing strategies), and foreign language writing (a survey of empirical studies, an outline of different teaching methods, and a consideration of writing as a thinking tool). Following an introduction by the editor, articles and their authors are: "Constructing a Voice from Other Voices: A Socio-Cognitive Perspective on the Development of Authorship in a Beginning Writing Classroom" (Stuart Greene); "Computers and Writing: Implications for the Teaching of Writing" (Luuk van Waes); "Speech as a Content-Generating Strategy in Writing" (Christian Kock); "What Do We Know about Writing Processes in L2? The State of the Art" (Hans P. Krings); "Text-ing: Toward a (Foreign Language) Writing Didactics" (Karl-Heinz Pogner); and "Teaching Expository Writing" (Lennart Bjork). A list of contributors is included. (NKA)

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Introduction

Karl-Heinz Pogner

10 to 15 years after the formation and institutionalization of an American writing research community with international influence and the establishment of an independent discipline 'composition studies' in the USA, we appear to have entered a period of retrospective summing up. A number of articles summarizing writing research and writing theory have been published lately; most of them stress this historical perspective.

Thus, e.g., the synopsis by Nystrand/Greene/Wiemelt (1993) describes the intellectual history of composition studies as a succession of paradigm changes: the focus on the text as form was superseded by the focus on the writer, the reader and the cognitive processes involved. Finally, this concept was in turn replaced by an increased interest in the context and especially in the social components of the writing situation (cf. Johns 1990). The social dimension is interpreted either in the sense of a "social-interactive" approach (cf. Nystrand 1989) or in that of "social constructivism" (cf. Witte 1992).

In part the heated debates centred around the question 'cognitive or social perspective?' (cf. Bergenkotter 1991) seem to be gradually cooling down, and there are signs that the dichotomy 'cognitive vs. social' is now becoming obsolete: thus, the newest trend is known as the "socio-cognitive" or "dialectical" approach (Flower 1989, Greene 1990), even if no final decision has been made as to whether the emphasis is on 'socio-' or on '-cognitive'.

In the USA – at least with regard to mother-tongue writing – a new change of perspective appears to be taking place. The research situation in Europe continues to be characterized by the adaptation of the process approach (cf. the publications of the SIG Writing; Boscolo 1989, Boscoio/Esperet/Fayol 1991, Eigler & Jechle 1993). Here too, however, purely cognitive models have by now been supplemented by social components (e.g., Smidt/Evensen 1991). The didactic situation is pervaded by the juxtaposition and the interlacement of differing concepts, whereby some countries show a preference for process didactics, an

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approach which has also entered into the pedagogy of foreign-language teaching (cf. Krumm 1989 and Portmann 1991:213-219).

It is therefore not surprising that the articles included in this volume, while repeatedly referring back to the process framework, at the same time overcome the restriction to the cognitive processes of individual writers. The articles were written in the context of the 2nd Odense Writing Day, which was organized for the purpose of presenting to a wide audience of researchers, teachers and students of the native language and of foreign languages some facets of the extensive context in which writing processes, written communication and the teaching or learning of writing skills take place.

In the first part of this volume, the extensions of the process approach in the narrow sense of the word will concern the didactics of **mother-tongue writing**. The first article will examine how important social roles are for writing in the context of the classroom and of school as an institution. It will also show how **cultural factors** influence the interpretation of writing tasks. The second paper will classify writing profiles and describe the influence of the **writing mode** on the writing process. The final article will then propagate the use of oral communication as a **writing strategy**.

The second part of this volume will be devoted to **foreign-language writing**. The first article will give a general view of **process research** in the field of the foreign languages. The next paper will outline different writing concepts and the resulting **didactic positions**. The volume will be completed by a report of the experiences made in teaching expository writing using **text-critical analyses** as a means to develop independent thinking among students.

In the first article of these Odense Working Papers, **Stuart Greene** demonstrates his socio-cognitive approach by means of a concrete analysis made in the writing environment of an American university. Greene considers writing primarily as a form of constructing and negotiating meaning taking place in a certain cultural context. His case study based on think-aloud protocols, classroom discourse and retrospective accounts describes with great precision the cognitive struggles of a beginning

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college writer who is asked to produce a text of his own as a reaction to other – non-fictional – texts.

The interpretation of the writing task by the writer is influenced not only by the way in which the teacher presents the task, but also by the (hidden) curriculum of the school system. The latter often attaches more importance to the reproduction of received information than to the use of one's own knowledge in order to attain one's own rhetorical goals. Greene's study describes the influence of cultural factors (in this case, socialization for Western culture) and of social roles on classroom talk and writing as well as on the individual cognitive processes. Greene's observations are of particular interest for writing teachers. They show that the analysis of the writing process (and not only that of the product) helps teachers not only to find out **how** learners interpret a task set to them, but also **why** they interpret it in this way. It is interesting that the interpretations of the learners do not always correspond to those of the teachers. Teachers' feedback to and correction of students' texts should give more attention to this fact in future.

Luuk van Waes' article describes studies in the educational and organizational setting of a Flemish university in Belgium. On the one hand, van Waes develops a typology of writing profiles by means of an experimental setting and with the help of statistical methods. On the other, he examines the validity of the subjective impression that the way in which one writes undergoes a change when one switches from pen and paper to a word processor.

His study not only shows that the writing process changes when writers switch to the computer, but also that the influence of the writing mode varies considerably from writer to writer. The large variation to be observed here makes it impossible to answer the question as to 'How can we help writers to use word processing systems better and more effectively?' by simply saying 'Teach them **the best writing profile!**'. Learners must rather get to know different writing strategies in order to be able to use the strategy most suitable for them personally and for the writing task in question. As a didactic method of achieving this, van Waes proposes allowing the learners to explore different writing profiles by themselves in the classroom.

Christian Kock in his paper partly goes beyond writing and describes the advantages of oral communication in comparison to written communication. Kock attempts to make these advantages useful for the teaching of writing. His observations stem from cross-departmental writing courses and writing counselling at Danish universities.

Advice such as "Start now and keep going!", "Start anywhere!", "Write in chunks!", "Don't worry about language and mechanics while you write!" and "Write more about your focus!" aim at using - in writing - patterns of behaviour usually occurring in spoken communication. Stronger use of these 'oral' strategies is supposed to generate more and better raw material for written texts. In everyday life, the use of speech as a content generator previous to or during writing is primarily a question of individual writing habits. Teaching should develop these habits. As a kind of prewriting technique, the 'oral' approach therefore plays an important role for process didactics in the context of inquiry activities or of collaborative planning.

The article by **Hans P. Krings** is the first in this volume to expressly discuss writing in a foreign language. His synopsis of methods and results of process research expands the picture given by the reviews (cf. Krapels 1990 and Silva 1993) and bibliographies (cf. Schecter & Harklau 1991 and Silva & Reichelt 1993f.) published up to now. Whereas the standard synoptical articles primarily cover the ESL or EFL field (English as a Second Language; English as a Foreign Language) and report primarily on American research, Krings includes other foreign languages and European research projects in his discussions.

All in all, Krings interprets 9 empirical studies of five different foreign languages. In his opinion, it is necessary to be very cautious when making general statements on the foreign-language writing process. The number of informants in the individual studies is too low to allow this. Krings also asks us to consider that the informants are almost exclusively university students. And still, there seem to be two trends. One the one hand, we can observe considerable individual variation among writers, which makes it difficult or even impossible to describe the typical writer. On the other hand, it is obvious that the native language plays an important role for writing in the foreign language.

Of importance for the didactics of foreign languages is Krings' point that error analysis can help us to find out **which** mistakes writers make, but that error analysis cannot explain **why** they make these errors. However, this question can be answered by examining the writing processes, as these reveal the hypotheses which the learners make about the foreign language. In order to support this process of forming and testing hypotheses - so important for learning languages - teachers must not only evaluate finished texts, but give feedback (to the hypotheses) during the entire writing process.

The production didactics developed by **Karl-Heinz Pogner** also focuses on feedback and reflexion. Pogner's article examines the extent to which central paradigms of writing didactics can be combined to form a didactics which considers writing as a significant form of linguistic interaction and therefore takes the communicative function of texts seriously. The texts produced in a workshop are addressed to recipients in the real world. In this way, part of the foreign-language reality is imported into the classroom.

The writing didactics proposed by Pogner, in which the learners cooperate and collaborate in a complex writing process, lays particular emphasis on the conscious use of linguistic means during the production process. In addition, on a meta-level, the learners observe collective and individual writing processes in 'didactic loops' which repeatedly interrupt the actual process.

The last article in this volume also has a didactic orientation and deals with writing in a foreign language too. **Lennart Björk** describes his experiences in the field of expository writing taught in English courses at a Swedish university. Björk considers writing as a thinking tool which can promote critical and independent thought.

Björk presents models which teach the critical analysis of texts in the framework of process teaching. Thus, in the pre-writing phase, the students are to find characteristic features of the text type focused upon in order to prepare their own text production. Then, the learners are to be encouraged, step by step and by means of a checklist, to look at their own writing task from as many points of view as possible before putting their

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first draft to paper. Björk exemplifies his approach using the text type 'proposal-making text'.

If we should look for a common trend in all articles collected in this volume, we could first of all say that, for all contributors, writing is more than just a means of language learning reinforcement or a display of language proficiency.

In addition to the contributors' interest in the process framework mentioned above, we could name the all-pervading interest for questions of didactics. The contributors repeatedly ask which didactic consequences should be drawn from the points of view presented. This is not surprising: the Odense writing convention was meant to be a forum for teachers working on all levels of the educational system.

One more thing is conspicuous: in addition to the actual writing training, which aims to improve text quality and writing process, the raising of consciousness and awareness of learner and teacher is repeatedly mentioned. This seems to be more than just a rollback to the basics, as the focus is not simply on grammatical and other purely formal topics (aspects of the **language system**), but also on conscious linguistic choice, functional adequacy and interpersonal, possibly even intercultural phenomena (aspects of **language use**). In my opinion, this pragmatic dimension should be retained and emphasized.

We should at this point also mention that, in the didactic conclusions drawn here, the students are at all times considered as learners with a right to find out for themselves how their writing processes take place and how these can be changed. The teacher should help them with this investigation. We cannot say at this stage whether this means that an equilibrium between process, product and writer has already been achieved.

Finally, an important reservation must be made concerning the validity of the recommendations presented in this volume: they all more or less focus on school-sponsored or academic writing. This can probably be attributed to the fact that all contributors belong to the group of teacher-researchers or of researcher-teachers. In fact, most of our knowledge on writing processes, and the didactics derived from it, stems from the field

of school-sponsored or academic writing. As this writing has an important educative mission to fulfil and shoulders the weight of influential school traditions, it represents a very specialized form of writing, but we should remember that this is only one of the many possible forms of writing. In school writing, the student must often show that he or she has certain knowledge which the reader, in this case the teacher, usually already possesses. Some of the starting problems which occur can certainly be attributed to this setting. Real-life writing can have very different functions, for example that of informing the reader of something which he or she did not know beforehand. This volume does not investigate the question as to which writing tasks occur in everyday life and in discourse communities other than the academic community (cf. Swales 1990) or in which way these tasks are performed within these different contexts.

Generally speaking, research into writing taking place outside the sphere of school or university composition is still not very well established as a discipline - in spite of occasional optimistic reports to the contrary. Surveys and ethnographic, rhetorical and sociolinguistic studies on everyday writing (cf. Barton & Ivanič 1991), writing at the workplace and professional writing (cf. Häcki-Buhofer 1985, Odell & Goswami 1985, Kogen 1989, Matalene 1989 and Spilka 1993) as well as administrative writing (cf. Gunnarsson 1992) are still quite rare. However, research into writing outside of school is important because it can protect us from rashly interpreting problems specific to academic writing or school writing, such as they are for instance described by Greene in his article, as general (cognitive) writing problems.

Although 'real-world writing' is not taken into account here, these *Odense Working Papers in Language and Communication* give a comprehensive overview of recent research work. In this sense they present "more about writing" and will, I hope, inspire others to undertake further reflection and research on the subject of writing.

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Constructing a voice from other voices. A sociocognitive perspective on the development of authorship in a begin- ning writing classroom

Stuart Greene

Summary

The purpose of this essay is to discuss a case study of how one beginning college writer attempted to integrate his own ideas with the ideas of others in composing an argument. Three questions motivate the larger study that this writer participated in: 1) How did the instructor represent the writing task and the process of writing in the classroom? 2) What are some possible ways that student-teacher interactions can influence how students negotiate and construct meaning in reading and writing? and 3) What were students' interpretations of writing an argument based on different sources of information? That is, would they see this task as asking them to rely on prior knowledge and experience or to rely on the texts they read as primary sources of information? Analyses revealed that students' legacy of schooling can influence the style, form, and content of what they write. This legacy values recitation of received information rather than the purposeful use of what students know in order to develop their own rhetorical purpose. Students' evolving interpretations of the task can also be influenced by their own personal goals for writing and the teacher's responses to their work. These analyses suggest that if we are to help our students develop as writers, we need to listen closely as they negotiate a sense of authorship in their writing. Such a project entails making our students' thinking visible through close, systematic observation, detailing the drama that unfolds as they create a text from other texts.

1. Introduction

This essay explores how beginning college writers go about integrating their own ideas with the ideas of others, that is, in creating their own texts from other texts. Creating a text from other texts has become a hallmark of what some educators have called "critical literacy" (e.g., Rose 1989; cf. Freire 1973) and can provide a window on a problem that is not unique to beginning writers, but which has become increasingly more a part of beginning writing instruction (e.g., Bartholomae & Petrosky 1986): how to mediate and make sense of different and conflicting voices within a shared conceptual world (cf. Reechio 1991). Though educators have come to value critical literacy,

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the ability to analyze, synthesize, and integrate others' ideas within one's own intellectual project (e.g., Bartholomae 1985), few studies, specifically with beginning writers, have looked closely at the motives, decisions, and actions that influence students' thinking as they read to write in school. In fact, despite an increasing concern with integrating reading in the "remedial" writing classroom, Hull and Rose point out that "we make inferences about what students learn or don't learn with limited knowledge" (1989:140). But if we are to help beginning writers learn to think critically, then we will need to know more about how students struggle with conflicting discourses as they construct their own experiences and advance their own rhetorical purposes as authors.

Specifically, I have used the construct of authorship as a critical referent for understanding what is involved as students attempt to make a contribution to a scholarly conversation, a process that can be problematic for inexperienced writers. After all, students must not only learn how to write for a teacher, but for an undefined audience of readers within a given disciplinary community (e.g., Greene forthcoming b). Therefore, making a contribution requires that students negotiate their options within different contexts, adapt information from sources and prior knowledge to meet their goals within the bounds of 'acceptable' academic discourse, and restructure meaning. Here restructuring may entail supplying new organizational patterns not found in sources, appropriating information as evidence to support an argument, and making connective inferences between prior knowledge and source content to create a novel text.

I realize, too, that students' contributions as writers are always provisional, depending not only on their ability to establish an intellectual project of their own, but upon certain authorizing principles that exist outside of themselves as writers. These authorizing principles can be seen in the texts that define the work of a discipline and in a field's conventions, each of which give legitimacy to the form and substance of one's writing. Readers' responses, of course, also serve to sanction the legitimacy of what writers say and how they say it. Still, the source of one's authority in writing can come from an author's ability to create and support his or her vision, one that recognizes that

more traditionally accepted sources may fail to function as adequate models or fall short of providing adequate solutions to problems. The choices writers make and the kinds of transformations they perform in organizing, selecting, and connecting information provide the criteria against which writers demonstrate autonomy amidst the authority of tradition (cf. Greene forthcoming a).

To illustrate the decisions students make in composing, I will provide examples from a recent study I conducted that explored the kinds of resources that first-year college students in a beginning writing classroom drew upon in writing an essay based on two sources of information: the texts they read and their prior knowledge and experiences. My hope is that by discussing this study we can begin to talk about the ways teaching can speak with directness and sensitivity to the process of learning. How, for example, can we help students adapt and transform what they know in ways that will enable them to be heard? In short, how can we help them accomplish their goals as authors?

2. The promise of cognitive process theory: an historical overview¹

To raise these sorts of questions about what is involved in authoring a text helps bring into focus the profound and pragmatic acts of mind that often remain hidden when we look at texts alone. As an emerging body of research (rather than a single theory) cognitive process theory has, during the past decade or so, challenged the 'current-traditional' paradigm in composition. Current traditionalism tends to privilege texts and the decorum of convention, rather than the intellectual and creative processes of composing that for some lay too deep to be fathomed or taught. Although text analysis can provide a means for identifying patterns in students' writing, these methods may be limited in their ability to tell us **what** motivates the choices students make and **why** certain patterns occur in writing. After all, writing happens in real time,

¹This discussion is based on Linda Flower's and Stuart Greene's forthcoming article *Sociocognitive Theories of Writing*.

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in affectively loaded, socially situated acts of cognition. Writers, moreover, are engaged in constructing meaning, rather than finding it – in acts of interpretation and inference as they organize, select, and connect information. For Flower and Hayes (e.g., 1981, 1984), we can best understand some of these dynamics by seeing writing as a problem-solving process, that is, as a goal-directed thinking process.

One critical feature of this goal-directed process is that it depends on strategic knowledge – the ability to 'read' a situation. This ability not only helps writers determine what is appropriate in a given context and how to fulfill one's goals, but to judge why certain moves might be effective (Flower 1990b). Just as rhetoric rests on finding the available means for persuasion, cognitive research has led us to ask about the strategies that allow writers to explore and then transform their own knowledge, or to anticipate and adapt to readers.

Making comparisons between expert and novice writers (people who are more and less experienced in a given discourse) has been a favored tool in basic research for teasing out the distinctive features of the writing process. It shows, for instance, how some writers use planning to construct far more elaborated and sophisticated representations of a rhetorical problem than others. From such studies, we have begun to see how writing changes when writers actively recognize and resolve conflicts in their own thinking (e.g., Bereiter and Scardamalia 1987; Flower and Hayes 1981). At the same time, we understand that the development of expertise is not a linear process since the context surrounding a novice's attempts to write or solve a problem is very different from that of an expert.

Expert/novice comparisons have provided the groundwork for a new approach to teaching. In contrast to current-traditional composition methods, this approach asserted that writing, the thinking act, was itself a significant object of study and that effective writers had a distinctive repertoire of problem-solving strategies. Education could indeed intervene where it mattered by teaching the process of writing, not just showing how to analyze examples of well-wrought prose. Thus process instruction has raised important questions about the conditions under which writers can make the best use of prose models (e.g., Greene

1992) and whether it is possible to simply immerse students in a literate environment and expect that students will learn the sorts of strategies that will enable them to be heard in an academic discussion. A key concern is how we can help students make the transition to new, often more difficult strategies that specialized forms of academic literacy demand.

The first wave of cognitive process theory building came with efforts to describe the underlying shape of the process. In *The Composing Processes of Twelfth Graders*, Emig (1971) used both retrospective accounts and think-aloud protocols to identify distinctive moves and stages (e.g., prewriting, planning, drafting, and revising) in the writing process of her 12th graders. The cognitive process theory of Flower and Hayes drew on rhetoric and cognitive psychology to ask how we might model or describe the basic, underlying processes that go on in composing. Such modeling had proven to be a powerful tool in cognitive psychology for developing theories, based on data from thinking-aloud and behavioral protocols. In turn, these models could then be tested against new data. The problem in modeling, however, is a conceptual one: how do you conceptualize and talk about a complex process in a way that captures meaningful (even though they are not absolute) features within that process? The test of a model is its ability to account for new data and to guide research in productive ways.

The Flower/Hayes model (see fig. 1) presents a number of claims and assumptions. It identifies three significantly different processes within the cognitive event of composing. In the planning process, writers construct a mental representation of meaning by setting goals, as well as generating and organizing ideas. Because people make meaning in different ways, some of which are linguistic, imagistic, structural, and emotional, constructing a representation in formal written language then becomes the focus of the translating process. In reviewing, attention shifts to reading/reviewing and evaluating and revising plans and text. As think-aloud protocols make clear, these processes draw heavily on themselves and alter long-term memory; in fact, they operate in the same reciprocal relation with the world around them, particularly the task and a writer's evolving text. In the visual conventions of this

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discourse, the model also asserts that composing is not a series of steps or stages; instead, composing is a dynamic, recursive process: one process may often be embedded within one another. Thus revising one's goals may require a return to planning.

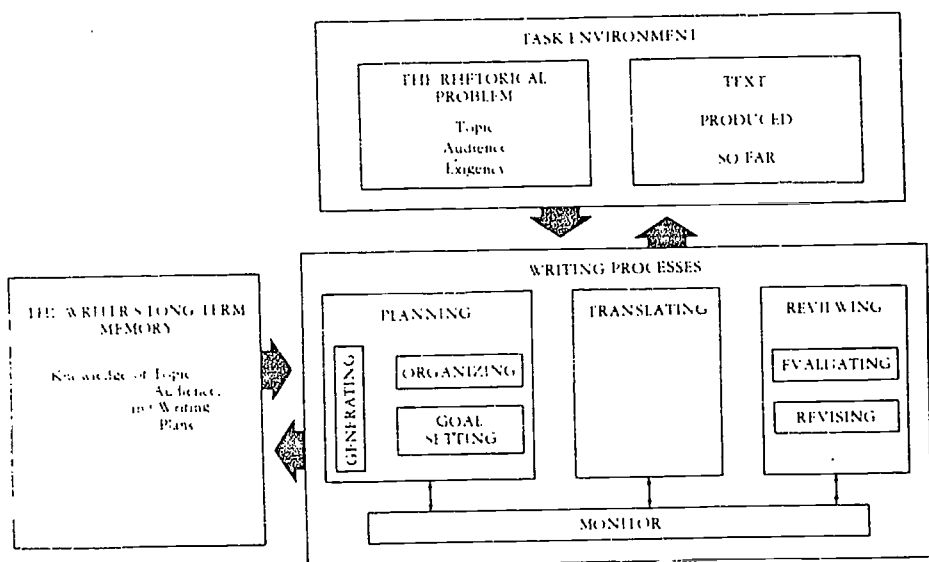


Figure 1 Flower/Hayes model of composing
(Flower/Hayes 1981:370)

Looking back from our current vantage point at the line of research this perspective produced, we can see this early cognitive process theory raising some challenging questions. What forms do very general processes postulated in the model take in practice? What does planning, for instance, look like in different situations, in the hands of different

writers? How do people represent a given task to themselves? In what ways does context cue cognition? And to what extent can our research suggest places where instruction might make a significant difference?

More recently, researchers have begun to pose a different set of questions, not so much about **what** writers do, but **why** they make the choices they do in writing. In exploring the relation between cognition and context, this line of research has used observation as a way to create more grounded theories of socially-situated meaning (Flower 1989; Greene 1990). These **why** questions arise from an increasing concern with rhetorical situations and a growing sensitivity to the diverse assumptions and goals that influence writers as they move in and across these different contexts. Researchers who ask such questions argue that differences in performance and strategies are not always best described in terms of deficits and failures. Hull and her colleagues, among others, point out that other factors – for example, writers' past experiences with writing (e.g., Hull & Rose 1989 and 1990), the evaluative climate of the classroom (Nelson 1990), or their assumptions about the task (e.g., Ackerman 1990) can influence their writing decisions and performance.

In fact, task and context can shape the social purposes for writing, the persona writers adopt in composing, and their understanding of what it means to think and act in different disciplinary forums (Herrington 1985). Thus we may expect that a given task might predict differences in the ways students compose an essay. But, as studies have begun to show, when we examine students' processes of composing, we find that an even better predictor of what students will do is the task they give themselves. Their interpretation often violates, even ignores, the situation or task that a teacher designs (Flower et al. 1990 and Greene 1993).

In the end, cognitive process theory has become a useful lens through which to study the thinking of writers within socially and culturally organized practices. It pursues specific issues and problems, such as how writers negotiate a sense of authorship, how one's interpretation of a task figures into student learning, and the role that disciplinary knowledge plays in the development of academic thinking. It is also

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leading to broader theories about how meaning arises out of the reciprocity between writers and readers. Most important, the lens of cognitive process theory is beginning to open up more sensitive ways to understand the strategic knowledge students bring to the act of composing, the reasoning that motivates their choices as writers, and the ways teachers can help students think critically and independently.

3. Studying authorship in reading to write²

3.1. The story of one student's evolving text

To ground these theoretical issues, I want now to turn to the study of authorship that I discussed at the outset, a study that builds upon and seeks to extend the boundaries of cognitive process theory. In doing so, I want to think for a few moments about one student's essay that focuses on education in the United States and what we learn from what he has written. Below is the introduction from his essay which I have not edited.

Rose, Rodriguez and Hirsch have raised many interesting questions about the education system in this country, questions such as what will be taught, who will decide, who will be taught, how will it be taught? But all of these questions focus around one thing, what Hirsch called cultural literacy. He defines it as "the network of information that all competent readers possess" (50). All three authors agree, in one way or another, that our education system is the cause of an increased cultural illiteracy among the people of this country, particularly with the people who are at the stage of their secondary and post-secondary education. The result of this increase has produced an increase of students who are unable to meet the level of cultural literacy set by the school. The difference between these authors is that although each knows what the general problem is, each has his own idea of where the problem is specifically coming from and his own way of solving the problem.

²This study was funded by the Research Foundation of the National Council of Teachers of English.

In his introduction, this student establishes the importance of certain questions that find their source in E. D. Hirsch's conception of cultural literacy; he maintains that different authors agree that the educational system in the United States is not working; and he points out that each author has a different idea about how to solve the problem. This student presents his questions and concerns in a clear and direct way, thus setting up the discussion that will follow. We expect a review of the issues and what each of these authors has said. What may be less clear is what the author thinks about the issues he writes about. Given the way he frames this essay, what would you infer was the assignment he was given? To write a summary of the issues he has read about? To include his own ideas? To analyze and synthesize information from sources? A key question, for me, is how this student interpreted the task he was given and the story that lies behind this text. What prompted this writer to focus on these three authors and the issue of cultural literacy? Were there other choices that he might have made? What does he leave out?

In what follows, I want to tell the story behind this student's paper, looking first at the classroom setting in which he wrote his text. Implicit in this description of the immediate context is an argument that is central to my study of authorship: to understand what is involved in the process of reaccentuating different voices in making one's self heard in a scholarly conversation, we need to look closely at the role that individual cognition plays in writing, in addition to the context that surrounds one's writing. By looking closely at individual writers, we can provide an important link between the private and often unpredictable acts of mind and the form, style, and expression of students' ideas within a given rhetorical situation. The implications are significant for those who teach and develop curricula because we can begin to understand the reasoning behind the choices students make as they attempt to adapt and transform the ideas of others into their own idioms. We may assume that a writer's interpretation is a stable, integrated image of a task, but writers often change goals and strategies throughout the process of composing because of their conflicting sense of who they are writing for (Greene 1993; cf. Flower 1990a).

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Specifically, I explored the notion of authorship in a beginning writing class in which an ethnically and culturally diverse group of fifteen students spent the term reading and writing about the issue of literacy. The starting point for their analysis of this issue was a literacy autobiography that focused on a wide range of questions³: What role has language (including talk) played in their family and different social groups? How did reading and writing figure into their relationship with their friends at various stages of their lives? What kinds of reading and writing had they done in school? What significant memories did they have of successes and failures? And what role has reading and writing played in developing their identity? These students shared their work in writing groups, began to formulate their own theories about what constitutes literate practice, and read such works as Richard Rodriguez's *Hunger for Memory*, Mike Rose's *Lives on the Boundary*, E. D. Hirsch's *Cultural Literacy*, and excerpts from Eudora Welty's *One Writer's Beginnings* and Alice Walker's *In Search of Our Mother's Gardens*. About mid-way through the semester, the instructor asked students to construct an argument in which they furthered their own understanding of literacy, basing their essay both on their own experiences and the reading.

In studying students' approaches to this reading-to-write task, I asked three questions: a) how did the instructor represent the writing task and the process of writing in the classroom? b) what were students' interpretations of writing an argument based on different sources of information? Would they see this task as asking them to rely on prior knowledge and experience or to rely on the texts they read as primary sources of information? and c) what are some possible ways that student-teacher interactions can influence how students negotiate and construct meaning in reading and writing? To answer these questions, I took field notes, audiotaped each class, and used various process-tracing methods as a way to understand students' evolving interpretations of the task, including think-aloud protocols and retrospective accounts.

³ I am grateful to Deborah Brandt, a colleague at the University of Wisconsin, for this assignment.

These questions grow out of what some (e.g., Spivey 1987) have called a constructivist view of reading and writing that is grounded in cognitive process theory. Constructivism portrays readers as actively building a mental representation by connecting given information to previously acquired knowledge (Spiro 1980). This view of language comprehension has many historical antecedents in psychology, particularly in the work of Bartlett (1932), who argued that understanding entails making "an effort after meaning." Meaning does not reside in texts. Instead, readers construct meaning using textual cues and prior knowledge organized in cognitive structures or schemas and select information based on different relevance principles. Writers, who are also readers, embellish what they read with examples and counterexamples (Stein 1990), think critically about what they read in light of their goals as writers, and structure information in order to build a coherent representation of meaning. The extent to which writers rely on sources or contribute something original depends on whether writers have sufficient background knowledge (e.g., Ackerman 1991), whether the relevant information is in the sources (Spivey 1990), or how writers interpret a given task (e.g., Greene 1993).

This is not to say, as some might observe, that these sorts of meaning constructive acts are somehow independent of a given context or situation. Rather, any act of writing is collaborative. As writers compose they make assumptions about certain prior texts, the expectations that readers bring to their texts, and the kinds of responses that their writing might evoke. The notion of situation or context, however, is not given, but is constructed within a writer's interpretive framework. For example, "[a]s people interact with each other [within a classroom], they build a theory about what is occurring, what is appropriate to talk about, and how to best express [their] ideas" (Bloome & Bailey 1992:191).

Students' evolving interpretations of a task are, therefore, embedded within the history of a classroom: people act and react in the context of historical relationships they have constructed. In acts of composing, people must account for and react to those historical relationships. The material conditions of the classroom context include the questions a

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teacher raises and the students' responses. How the teacher responds to the students' answers demonstrates to the whole class what forms of language and content are appropriate and for what they will be held accountable (Bloome & Bailey 1992; Nystrand & Gamoran 1991). Thus classroom discourse can provide a useful lens through which we can gain some insight into a writer's current understanding of a context or situation and how the give and take of student-teacher interactions can shape that understanding. Admittedly, what students and a teacher establish may evolve and change. After all, as an instructor and student orient themselves to one another, they adjust their responses in an unfolding drama that throws into relief a complex interplay of language and values (Sperling 1991).

The social negotiation of meaning that occurs not only depends on students' own goals for writing, but how they view writing in school. In fact, students' interpretations of an immediate classroom context may well be colored by a legacy of schooling (Applebee 1984) and other experiences with reading and writing that may come in conflict with the assumptions of this more immediate context. The ways in which they construe a task, the choices they make about whether to take risks by including their own ideas or not, are, in large part, dependent on what they have learned from prior learning experiences about what is appropriate and what effects their actions are likely to have (Miller 1984). It is relevant that a legacy of 'remedial' education in the United States has often prevented beginning writing students from learning how to position themselves within an academic argument. In fact, many of our students' experiences with writing have been restricted to exercises in grammar and punctuation, so that they have not had occasions to use writing as a way to explore their ideas and to develop arguments through reading and writing. My point is that the notion of context consists of a universe of discourse, not just the immediate environment, in which there are certain tacit assumptions between reader and writer about the conventions and functions of language maintained within the culture of school. In fact, we might see context as a shorthand way of saying that writing is always situated in cultural, historical, and institutional settings (Witte 1992).

Finally, the three questions motivating this study derive from both psychology (Scribner & Cole 1981) and sociolinguistics (Gumperz 1982; Heath 1986) in seeing writing as a social practice that underscores the purpose behind academic work: people do things for a reason; they have purposes; and they assume certain roles. The way people act is not just related to their abilities, but is influenced by socially constructed roles and what they believe is or is not appropriate (Barton 1991:9). Thus it matters where the primary responsibility for the successful transmission of knowledge rests in determining what students do. Those who view a teacher as an examiner are, perhaps, less willing to take risks than those students who envision their teacher as someone who values their ideas and helps them cultivate a sense of ownership and engagement in instruction (Britton et al. 1975; Greene 1993). Specific role relations result in specific kinds of language uses

3.2. An analysis of classroom discourse

With these assumptions in mind, I now want to turn to an analysis of the classroom context that served as the site for this study. When the instructor asked his students to construct an argument, he wanted them to reflect critically upon and challenge their own assumptions about language, and give them an opportunity to explore an issue in a focused way. Specifically, he sought to expose his students to different and conflicting perspectives on literacy; to teach them how to appraise a writer's argument; to see links among different arguments in a variety of source texts; to learn how to narrow a topic and formulate a controlling idea or point of view; and to help students learn how to interweave their own ideas with relevant information they use from sources.

In class, he read the assignment aloud, emphasizing that his students should "play with the ideas of the other people [they had] been reading"; that they should "formulate their ideas ... [their] own point of view ... and set up an argument"; "choose an issue that is interesting to [them]"; "map out [their] ideas"; "set up a dialogue"; "use sources to

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create a discussion." He also discussed the following criteria that they should consider throughout the process of writing their essays: Is there a clear problem that motivates the essay? Is it held in focus? Does the essay help clarify the problem? Does it go beyond the sources to make an original claim? Does the writer adapt information from sources for a rhetorical purpose?

In the discussion that immediately followed the instructor's remarks, one student initiated a discussion that focused on how E. D. Hirsch and Richard Rodriguez touched upon the idea of cultural literacy, and the student wondered how Mike Rose fit in.⁴ When the instructor responded to the student's question about how Rose's discussion of literacy fit in, he, the instructor, raised questions that were motivated by his attempts to clarify a point, and he summarized where the discussion had gone so far. As illustrated in the excerpt of classroom discourse below, he also tried to reframe the problem that students were working on to keep the conversation going.

Student 1: Hirsch and Rodriguez sort of talked about minorities possessing information (pause) actually I guess uh yeah Hirsch and Rodriguez I guess Rose did too.

Inst: Tell me again. What's the problem?

Student 1: Minorities possessing information.

Inst: Possessing infor ...

Student 1: Yeah, information which is ...

Inst: How do you mean that?

Student 1: How do I mean it?

Inst: Yeah. What do you mean?

⁴ At the risk of simplifying the ideas in these books, I'll give just a thumbnail sketch of each of these texts. In his book *Cultural Literacy*, E. D. Hirsch argues that developing a core curriculum that represents the best thinking of Western culture can help to remedy what he sees is a 'literacy crisis' in the United States. In an autobiographical work, *Lives on the Boundary*, Mike Rose provides, among other things, a probing analysis of education in America, describing in some very poignant terms the difficulties students face when they try to enter an academic community that they do not really understand. Rose also suggests that developing a core curriculum will not necessarily create the sort of equity in culture and society that Hirsch seeks. Finally, in his autobiography, *Hunger for Memory*, Richard Rodriguez explains the conflicts he experienced as a non-native speaker of English who desperately sought to enter mainstream culture, even if this meant sacrificing his identity as the son of Mexican immigrants.

Student 1: Well (laughs), which is essential for minor ... for improving social and economic status. (His voice goes up as if questioning.)

Inst: OK, crucial for social and economic advancement. How could we use Rose here, if we're thinking about this idea and we're able to find uh fairly pointedly from Hirsch and Rodriguez on this issue, what do we say about Rose, how could we work him into the discussion? (Silence for 5 seconds) OK, let's back up. Minorities possessing information. It's crucial for advancement. Now what do you mean by information?

What begins as a conversation between a student and his teacher evolves into a relatively open discussion among the students as shown in the excerpt that appears below.

Student 2: They don't possess it or they do?

Student 1: They do.

Inst: But ... you're saying that Hirsch and Rodriguez are saying that minorities need to have a certain kind of information?

Student 2: Yeah.

Inst: In order to advance. Is that right?

Student 2: Yeah.

Inst: And you're saying that Hirsch and Rodriguez say that?

Student 2: Well yeah.

Inst: OK.

Student 3: I don't understand the concept.

Inst: You don't understand the concept? Let's rework it.

Student 1: You want me to state it in a different way?

Inst: What are we getting at?

Student 4: Aren't we saying minority people need more information about culture so that they can further their lives? I mean like Hirsch and Rodriguez needed to know more about you know their own cultures so that we will better off in society.

Student 1: Sure. (He concedes the point and the class laughs.)

Inst: That's an example. What's the point, right? How do we phrase it so that it does make sense? Are we getting tripped by the word information? Is that the problem?

Student 5: Knowledge.

Inst: Knowledge. Do you like knowledge better? Is this what you're saying? Or is it different?

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Student 5: Well, that could be.

Student 1: But is it? (laughs)

That both students and their teacher frame questions, expecting active responsive understanding and anticipating such an understanding in return infuses such talk with a dialogic quality. In this way, the students and their instructor begin to create a "jointly negotiated context that establishes and perpetuates classroom roles and relationships" (Nystrand 1992:10). The issues students discuss are not given, but are constructed through the give-and-take of social interaction. And the students' roles require that they actively participate in the making of knowledge and meaning. In fact, the students not only help to maintain the conversation, but insure that it develops in a way that begins to reflect their own ideas about what they are trying to understand.

This kind of talk appears quite different, I think, from more traditional approaches to teaching in the United States, particularly in beginning writing classrooms, where discourse is often structured around a teacher's question, a student's response, and a teacher's evaluation (see also Hull et al. 1991; Nystrand & Gamoran 1991). Such an instructional sequence attempts to foster students' acquisition of given information; knowledge is not constructed, but transmitted, so that students play a passive role in learning.

From this excerpt, we catch a brief glimpse of the kind of textual world that the students and their instructor built together; the representation they construct through language provides students with an important source of information about the kind of talk that is valued and what is legitimate to talk about. How these students interpret the task they have been given depends on the context of particular events and the language used, language that lives on the boundary of other contexts and that is saturated with different and often conflicting values and beliefs (Bakhtin 1981; Vološinov 1973). The words 'construct an argument' enter from other contexts permeated with others' interpretations.

For many of the students in this class, this way of talking about texts and ideas is an alien discourse, so that not surprisingly they viewed this

discussion from an outsider's perspective. In some ways, the textual world the instructor and his students constructed was quite fragile, especially for those who did not see their own thinking represented in this conversation or who suffer the anxiety that perhaps they don't belong. As the student who wrote the essay that appears at the beginning of this section put it in a think-aloud protocol, "Rose ... he gives you an idea of what is happening to people ... happening to some of the students who are not prepared. And I just feel ... and it makes me think of whether I'm really that prepared or not."

In fact, as much as the instructor tries to bring his students inside of this textual world, it is important to notice that the discussion remains focused on the texts his students have read, not their own experiences as they might have expressed them in their literacy autobiographies. Moreover, even though the students read works by Eudora Welty and Alice Walker, the students were not encouraged, in these excerpts anyway, to think about how those authors' ideas might have contributed to the discussion about cultural literacy. What is left **unsaid** in this discussion is as important as what is said in thinking about how students might interpret the task before them.

3.3. Interpreting the task of reading to write

I imagine that some might disagree with my reading of this brief excerpt, perhaps wanting to limit or expand what I have observed. What I do hope to suggest is that an analysis of classroom discourse is but one lens through which we can begin to understand why students make the choices they do in reading to write and gain some insight into the struggle that is involved as they try to give expression to others' ideas in their own unique ways. Of course, how students construct meaning and give expression to their ideas depends on their prior linguistic and cultural experiences, the extent to which they see school as an important source of their success, their ethnic identities, gender, and a host of nonlinguistic social texts, including the physical arrangements of school.

An important way to understand how students negotiate a path through the ideas of others and their own thinking is through close systematic observation using diverse methods of study. As I suggested earlier, students' texts can reveal only a part of the story of how their thinking evolves as they make sense of their own ideas, enter into a dialogue with the voices of published authorities, and begin to forge a voice of their own (cf. Bartholomae & Petrosky 1986). Listen to one student who, for example, paused after reading the first few words of the assignment, particularly when he considered what it might mean to 'enter a conversation.'

First of all. I'm not even too ... I feel that it's ... that's the hardest part because I think it's going to be hard to so called 'speak' in this paper with these other writers, such as Hirsch, Rose, and Rodriguez. That's going to be pretty difficult.

Moreover, students' texts cannot reveal how they often struggle to respond when their values and ideas are challenged by authorities or when they struggle to make their thinking intelligible to others. Nor can we understand what goes unsaid in a student's text, even though what a student leaves out may be a very important part of the reasoning process that influences students' processes of composing (Farr 1993).

To illustrate some of these points, I again return to the student whose essay I began to analyze earlier. A Hmong student, Vuong (a pseudonym) came to the United States when he was five and is the first generation of his family to attend public school in this country. In the literacy autobiography he wrote for class, Vuong mentioned that he was never really encouraged to read very much, explaining that his parents were "never well educated." But he developed over the years a sense that school and learning English could be essential sources for his success. In the ninth grade, his first year of high school, he was placed initially in ESL (English as a Second Language) classes in science, English, and history because his test scores on English were quite low. By his second year, he had only one ESL class and had been placed in 'mainstream' classes, except for English. In his last two years of high school, he took both an 'introductory' course in writing, as well as a

class in 'intermediate' writing for 'native' speakers. In these classes, Vuong wrote comparison papers, argumentative essays (e.g., why television is better than going out into the stadium and watching the real game), but mostly he wrote reports that entailed doing some research. His previous teachers encouraged him to include his own ideas, but the primary emphasis was on the 'details' of writing, that is, 'how to format the paper', including footnotes and bibliography.

First impressions

After participating in and listening to the class discussion about cultural literacy, Vuong provided the following impressions of what he thought the task required in a think-aloud protocol outside of class. With the written assignment before him, he explained that the task appeared to require him to integrate his interpretation of the reading with his own opinions, to use examples, and to advance an argument.

So he wants us to write about the authors that we've been reading about... he wants us to get the main point of view of different authors and to discuss whether they agree with each other or they don't agree with each other and to pick out something from these three authors that is most important to you and try to get a position ... which author you think is most closest to your idea ... pick the authors that most agree with you and try to tell your reader and convince them that your point is the right one ... or is the most logical. He did want us to give examples of what the authors that we're going to choose say about their idea. Also he wants us to express our opinions of what these authors have seen.

Appropriating some of the language from the assignment – to use examples and express an opinion – he interprets the task in a reasonable way; he is simply doing what he was asked to do. But a further analysis of his initial impression of the task is quite revealing, especially when we consider how he foregrounds the authority of both the teacher and the authors he has read. It is, after all, his teacher who sanctions what he writes:

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He wants us to write about the authors that we've been reading about ... **he** wants us to get the main point of view of different authors and to discuss whether they agree with each other or they don't agree with each other ... **He** did want us to give examples of what the authors ... say about their idea (my emphasis).

And though recognizing the possibility of including his own idea, the student sees that the source of his ideas resides, for the most part, in the texts: "pick out something from these authors" and "express our opinions of what these authors have seen."

Thus, even though the assignment appears to invite students to adapt and transform the sources they read for their own purposes as authors, Vuong's interpretation reflects a fundamental tension between two versions of what it means to write in school. On the one hand, students are often asked to reproduce information, to demonstrate that they have done the reading for a single reader: the teacher as examiner. On the other hand, students in a university setting are also expected to orchestrate different points of view in developing an intellectual project of their own that foregrounds their ideas within an ongoing conversation. The differences are anything but trivial when students set out to write and try to determine their role as writers in fulfilling an unfamiliar task of creating a text from other texts or when they do not feel like they are a part of the conversation. In this case, Vuong appears to rely on a well-learned strategy of comparing different authors, thereby making an unfamiliar task familiar and eventually finds a way into this scholarly discussion about literacy in the United States.

Uncertain about his place in the university and the extent to which he is actually prepared to do college-level work, Vuong finds in the reading repeated images of students who feel they are outside of language, who have been silenced and marginalized, and who struggle to be accepted in a community that values a certain way of thinking. Mike Rose, himself, underscores his own anxiety that maybe "I don't belong." Perhaps, it is all a "ruse." And, like Richard Rodriguez, Vuong reveals a profound concern that his own assimilation in Western culture and Christian values will affect his relationship to his family, his traditions, and the language that defines who he is. In fact, we learn in a

retrospective account that he provided immediately after his think-aloud protocol, that he wants to write about cultural literacy because of the impact the reading had on him both as a student trying to succeed in school and his coming to terms with his cultural identity.

[The reading] has more meaning to me than what I've read during high school. It relates to me so much Rodriguez tells about his separation of his parents coming further from his parents because of education I've been finding that it's not only me, but it's becoming more in general for Asian students ... for my nationality. It's that as we become more educated we go further apart from our family and our traditions. We become more assimilated into the American culture. And so Rodriguez is telling me all this, which I knew before, but never in this way ... he's reading so much and not speaking his own language. And these are ... for some American kids this won't mean too much. [O]ur class comes from a middle class, so they are not familiar with these books here. And they can't relate very well to these books when I talk to them a few of them. But for a person who is assimilating into American culture this is a big problem. So for this paper I'm trying to get a more ... an increased understanding of what cultural literacy really means.

It is important, I think, to see that Vuong's interpretation evolves, focusing more on his own identity than the authors' ideas. Moreover, the source for writing seems to derive from a sense of conflict he identified between his own cultural background and the other students in class.

From interpretation to text

What is perhaps most striking about Vuong's text is not so much what is said as what is left **unsaid**. He doesn't talk about his own concerns about assimilation and ethnic identity. Nor does he mention the conflict that he feels between his reading of *Lives on the Boundary* or *Hunger of Memory* and his sense that the other students do not seem to understand the full import of these books. Instead, he focuses primarily on what the authors say about cultural literacy, which is consistent with his very first impression of what he might write about – that the task required him to talk about other people's ideas. In this, he demonstrates the

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power of his initial impressions of how he might write his essay and a legacy of schooling that places a great deal of value on recitation of received ideas. The reading clearly shapes his point of view and motivates his discussion of cultural literacy, so that he subordinates his own ideas to those discussed by published authorities. Still, there is an interesting subtext that suggests how Vuong constructed meaning in his own experience through the stories others told.

The opening paragraph helps to indicate the topical structure of his essay, one that focuses on the authors he has read and his statement of a problem: the lack of agreement about how educators will deal with the apparent failures of the American educational system.⁵ I have emphasized those phrases that indicate that the topical structure of Vuong's essay is organized around the ideas of the authorities' he has read:

All three authors agree, in one way or another, that our education system is the cause of an increased cultural illiteracy among the people of this country, particularly with the people who are at the stage of their secondary and post-secondary education. **The result of this increase** has produced an increase of students who are unable to meet the level of cultural literacy set by the school. **The difference between these authors** is that although each knows what the general problem is, each has his own idea of where the problem is specifically coming from and his own way of solving the problem.

What follows this introduction is a summary of the authors' positions. Vuong uses the sources to structure his essay and seeks some sort of consensus among these different authorities.

These authors go about arguing their points by first defining who is the culturally illiterate, then onto why the school system is at fault, and finally give their solution to the problem. **Rose's suggestion** is "more opportunities to develop [their] writing strategies ... to talk about what they [had been] learning....to let [them] in on the secret talk" (193-194) ... **Hirsch believes** that the

⁵ Nick Preus and Jeff Wiemelt, my two project assistants, made valuable contributions to my reading of this student's essay.

most culturally illiterate people are the young generation of Americans in high school. Hirsch states, "During the period 1970-1985, the amount of shared knowledge that we have been able to take for granted in communicating with our fellow citizens has also been declining. More and more of our young people don't know things we used to assume they knew." (51). He is saying the school system is not doing enough to increase cultural literacy in this country and as a result many of the American people cannot communicate at the same level as they once did.

At the same time, Vuong brings into focus the unanswered questions that plague educators and policy makers and establishes, at least momentarily, his own stance about affirmative action in the last paragraph. And it is here that he brings to mind his own insecurities as a student. He is not only concerned that perhaps he is not prepared to enter an academic community, but given his own progress in school Vuong sees the value of helping students in any way possible.

... I agree with Rose the most. Rose understands that there is a problem among students who are trying their best to increase their cultural literacy; therefore, we must help them as much as possible. Rodriguez believes that these people must be helped, but who should be helped? Who are really the minorities? ... Yes, there is a need to define the people who need help the most so that they could be helped, but when bilingual programs are not supported I disagreed. Rodriguez mistake is that bilingual programs in the 70's are not like the ones in the 80's. I think that if he could see how much bilingual programs have changed and helped people he would change his mind.

In reading Vuong's final draft, his instructor remarked that he was impressed with Vuong's attempts to analyze and synthesize the different positions on cultural literacy. But he also noted that it was sometimes difficult to distinguish between Vuong's point of view and the authors'. One must ask if assertions like those below represent what Vuong believes as well.

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The system is at fault because it permitted affirmative action and bilingual programs to prevent the majority of the minorities to have quality primary and secondary education. This is what Rodriguez believes affirmative action is doing to nonwhite students, "... admissions committees agreed to overlook serious academic deficiency [just fulfilling their status quo,] ... [such as] barely able to read, ... to grasp the function of a sentence, ... [to] compose a term paper ... [which is causing] those students with very poor academic preparation, [to have] few complete their course of study" (154-155).

As successful as Vuong seems to be in interweaving different and sometimes conflicting points of view, he seems to avoid the commitment that a sense of authorship entails. If his prior education tells us anything about Vuong, it is that he is a good student who is torn by his desire to assimilate into Western culture and his belief that he must retain his ethnic identity as a member of the Hmong community. He has done well in school, learning to accommodate other people's ideas; now, however, he has been asked to challenge the words of authorities he has been taught to trust. What he decides not to write about is as telling as what he chooses to discuss. And only by hearing his voice can we appreciate what he has learned in creating a text from other texts.

4. Conclusion

If we are to build robust theories of the kind of thinking that is involved in reading to write, then we need to look closely at the processes that interest us. It is easy to see what may be missing in students' essays, but what is more difficult and necessary is to understand that students' performance has both a history and a logic. By examining their attempts to make sense of and write about others' ideas in context, we begin to see the cognition that motivates students' performance in school. The adequacy of our explanations can be measured by the extent to which our theories reflect the social contexts we study, not by how well they fulfill the ideological concerns that a given theorist might privilege. To

what extent does a given theory provide a plausible and descriptive framework of what it sets out to explain? Is there support for the claims we make about the explanatory power of our theories?

In the end, it is one thing to talk about the need to encourage beginning writers to forge a voice of their own and to confront conflicting ways of using language; it is quite another to teach beginning writers to assume the role of authors who can position and reposition themselves in relation to different values and ideas. At the very least, we need to make our instructional models explicit, providing occasions for students to explore and discuss the social roles they believe they can assume in classroom talk and their writing. In some sense, when we shift the terms of instruction from recitation to dialogue, we force our students to transform their understanding of what it means to write in school. The resulting conflict, however, can be productive. Students begin to learn how to formulate and solve problems and to experience an urgent need to know and communicate their ideas. But such a transformation can be uneven since students' ability to adapt what they know is influenced by so many complicating factors. With teaching lies an important challenge: to make our students' thinking visible, seeing their choices as part of a living process that ordinarily remains hidden from view.

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Computers and writing. Implications for the teaching of writing

Luuk van Waes

Summary

In order to be able to describe the influence of word processing on the organisation of the writing process, eighty writing processes of experienced writers were analyzed (forty computer and forty pen&paper writing processes). The data were analyzed from three different points of view: time and product analysis, analysis of the pausing behaviour, and analysis of the revision behaviour. One of the main conclusions from these analyses is that computer writers spend more time on the first draft of their text and less on the finalization of the text, and that their writing process is more fragmentary compared to that of pen&paper writers. They also revise more in the beginning of the writing process than their pen&paper colleagues and pay more attention to the lower text levels and the formal characteristics of their text. From the analysis on the level of writing profiles it also became clear that a single individual will organize his or her writing assignment differently depending on the writing mode used. On the basis of these conclusions some suggestions for the teaching of writing are discussed.

0. Introduction

In 1750 Chevalier de Béthune spoke about a marvellous little machine in his book 'Relation du Monde du Mercure':

I will now speak about the art of writing. If you want to erase something of what you have just written, you can let the words evaporate and replace them by new words. In that case the lines automatically move apart and close again after the correction, if you wish. That is very useful, because after having reread a quickly written letter once or twice, one always finds that one should remove a repetitive phrase, badly constructed sentences or words not expressive enough; one often wants to reorganize the text if it turns out that the end of the text had better be moved to the beginning, or that a certain excerpt had better be followed by another one.

Not only a marvellous machine but also a marvellous speculation. It is remarkable that de Béthune in the first place refers to the many 'revision-possibilities' of his 'word-processor avant la lettre'. He describes ways of

adding and deleting text and distinguishes between revisions on the levels of word, sentence and paragraph. Still now, many computer writers believe that precisely these flexible revision possibilities make writing with computers attractive. The question remains though whether this subjective impression is correct, and, if so, in what way does this writing mode influence the writing process?

In this article I will first of all present a brief review of the research on writing and computers of the last decade. Secondly I will tell something more about my own research on word processing in educational and organisational settings. To start with, I will describe the design of two writing experiments. Thirdly, I will present a short summary of the most important results from the analyses of the different variables I used to describe the writing process. In the fourth part I will present the same results on the level of subgroups of writers that could be distinguished. For that purpose I built a new typology of writing profiles and compared the dominant writing profiles for the different writing modes¹. In the last part of this article I will try to give some suggestions about the way in which writing skills could be taught in writing classes. Suggestions based of course on the recent research about computers and writing and on my own experience.

1. Review of related research

So first of all I will give a short review of the research in computers and writing, especially the research on revision processes.

Research on word processing has been difficult to interpret. The difficulties mainly lie in the diversity of research methods and research designs used. Moreover, research in this field is relatively young. Only in 1985 did it take a real start and did thereby come out of the realm of speculation. Therefore we cannot yet speak about univocal results. Nevertheless a number of tendencies are becoming clear.

In the study of the influence of the computer on the writing process, the revision process has received a lot of attention. The hypothesis that computer writers revise more than pen&paper writers is confirmed in most studies (see e.g. Arms 1983; Bridwell et al. 1987; Case 1985; Collier

¹ Part of this text is based on an article previously published (*van Waes 1992c*).

1983; Fitch 1985; Gould 1981; Lutz 1987). Researchers who did not register a notable difference (e.g. Coulter 1986; Hawisher 1987; Kurth 1986) or sometimes even a decrease in the number of revisions (e.g. Harris 1985; Schriner 1988) had decided to limit the study to 'between' and 'after-draft' revisions. This limitation makes a comparison very difficult.

Secondly I would like to point out that according to a number of studies, texts written with a word-processor contained fewer spelling and punctuation errors than texts written with pen&paper (Daiute 1985, 1986; Duling 1985; Kurth 1986; Levin et al. 1985; Womble 1985). This result is not surprising if we take into account that computer writers usually pay more attention to the formal aspects of the text than pen&paper writers.

Thirdly, computer writers tend to write longer texts than pen&paper writers. This is one of the few results which most of the research reports have in common.

And finally, persons writing with a computer seem to develop a more positive attitude towards writing. This attitude is partly influenced by their general attitude towards computers and technology.

The big question that remains of course is whether texts written on a computer are better than texts written with pen&paper. The findings from research on this quality aspect have been ambiguous and results of individual studies are often contradictory. The following graph presents the findings of 20 comparative studies. The graph is based on a review article by Robert Bangert-Drowns (1993). On the X-axis the quality effects are clustered in categories based on standard deviations: 0 means that in those studies - three in total - no effect was found. From this graph we can conclude that almost two thirds of these studies found out that access to word processing during writing instruction improved the quality of students' writings. One can also observe that most of the effect sizes cluster between -0.25 and 0.50 standard deviations, indicating a small - mainly positive - effect. Only a few reports mention a real significant quality effect.

Personally I don't think that quality research is very useful. Not only because of the problems inherent to quality studies (should we use analytical or global evaluation systems; what about functional evaluation

etc.), but also because I think that there is no way back. The question is no longer: 'Should we use the word processor or not?'. The question now is 'How should we use the word processor?'. And, 'How can we teach writers or students to use the word processor more adequately and more effectively?'

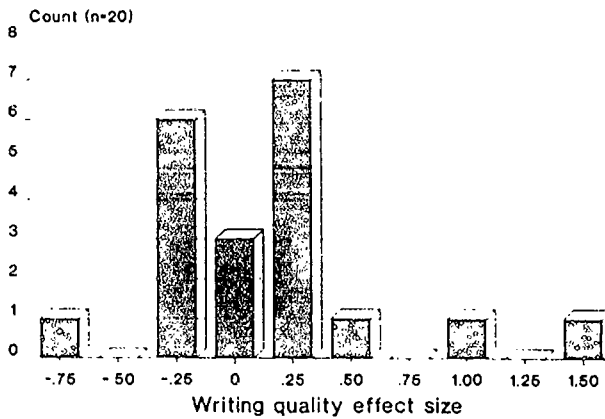


Figure 1 Review of quality research
(Source: Bangert-Drowns 1993)

Therefore, in my own research I focussed more on the influence word processors have on the writing process, not on the influence they have on the written product. In the experimental research I want to discuss with you today I will try to give an answer to these questions.

2. Experimental design

I compared three different writing modes in my research project: pen&paper, computer with a 25-line screen, and computer with a 66-line screen (A4 format). To be able to compare these modes I set up two experiments in which forty persons were asked to write two texts in different writing modes. In all, about 200 hours of writing were analyzed. The distribution of writing mode and text were based on a Latin-square design:

	SESSION 1	SESSION 2
Group 1 (5 subjects)	computer assignment A	pen&paper assignment B
Group 2 (5 subjects)	computer assignment B	pen&paper assignment A
Group 3 (5 subjects)	pen&paper assignment A	computer assignment B
Group 4 (5 subjects)	pen&paper assignment B	computer assignment A

The research method I used to analyze the writing processes had to meet three important requirements:

- observation and analysis had to provide a picture as detailed as possible of the writing process;
- results had to be quantitatively comparable;
- the writing process itself was not to be influenced.

I opted for video observations and automatic keyboard registration linked to a resident computer program² that registered every key stroke and the time between strokes. These observations were complemented by interviews before and after the experiment.

To allow for a comparable analysis of the basic material, I transferred the video images of the pen&paper registration (including pauses) to a process logfile in *WordPerfect* macro format. This was done with a program for automatic keyboard registration. The pauses were inserted later in the linear storage/registration.

This method allowed me to reconstruct precisely and completely the writing process in both modes, from the first letter to the last revision. On the basis of these reconstructions I analyzed the data from three different points of view:

- 1 In the *Time and Product Analysis* I counted e.g. the number of words in the final text, the period of time used to finish a first draft of the text (first writing phase); the ratio between periods of pausing and active writing etc.
- 2 In the *Pause Analysis* I measured the duration of pauses longer than 3 seconds and counted the number of pauses per writing phase (first draft and later) and per writing part (each writing process was divided in two equal time periods, part 1 and part 2). I also coded e.g. the nature of pauses (pauses followed by generating or revising), the place of pauses (within the sentence, between sentences or between paragraphs) etc.
- 3 And thirdly, in the *Revision Analysis* I counted the number of revisions and coded e.g. the nature of the revisions (distinguishing between addition, deletion, substitution, reordering), the level of the revisions (in which category I made a difference between revisions on the letter, word, phrase, sentence or paragraph level; also layout and punctuation corrections were coded). I also made a difference between typing

² I would like to thank H. Pauwels (University of Antwerp) who programmed (and reprogrammed) the keytrap software.

errors, formal and content revisions. One of the most important classifications was the so called distance of the revision, i.e. the number of lines from the point of utterance up to the place in the text where the revision was made; upward and downward.

The experiments were organized as follows:

	Experiment 1	Experiment 2
writing mode	computer (25 lines) computer (66 lines)	computer (25 lines) pen&paper
number of persons	20	20
experience with word processing	+2 year	+2 year
profile	acad staff members (lang) acad staff members (econ)	MBA-students acad staff (econ)
kind of text	report	report
length of text	2 to 3 p	2 to 3 p

Table 1 Survey of experiments

The selected methods of observation and analysis enabled me to describe in great detail the differences in the writing process between the two writing modes for the total group of writers as well as for the individual writers. Comparison of two experiments of two corresponding subgroups showed the method to be reliable.

3. Results of the experiments

What were the main results? I will summarize them shortly, neglecting the differences between screen modes for a while. From the different analyses we learned that computer writers organize the writing process differently from pen&paper writers:

- they spend more time writing the first draft (= first writing phase), and less time rewriting the text in the second writing phase;
- the average length of their texts is somewhat longer, but the period of time for writing their texts is the same as that of pen&paper writers;
- they insert more pauses in the course of writing but the pauses are significantly shorter, which implies that the total pausing time for both modes are comparable, but the course of the writing process in the computer mode is more fragmentary;
- they reserve less time for initial planning, but they spread out the longer pauses over the total writing process, which probably implies that they base their planning more on spread pauses on the level of sentences and paragraphs, instead of organizing their writing process from an initial detailed text plan;
- from the very beginning of the writing process they often alternate formulating and revising, which means that their degree of recursivity is higher than that of pen&paper writers;
- they pause more in the beginning of the sentences and spend less time on pauses between sentences and paragraphs, which points to a more local orientation of the planning behaviour.

As to what the revision behaviour is concerned:

- the total of their revisions is identical to those of pen&paper writers;
- their revisions are situated more on the level of letters and less on the level of words;
- they tend more towards formal revision, and they pay as much attention to content revision as pen&paper writers do;

- finally, they revise relatively little in the second phase of the writing process, and seldom do they submit the first draft to a systematic, gradual revision, as is the case in the pen&paper mode.

4. Writing profiles

These were the main 'statistically significant' differences between the pen&paper and the computer writing mode. In the next part of the paper I will try to interpret these differences on a higher level, i.e. on the level of writing profiles, which I define as a specific combination of variables describing the writing process.

As the writing model of Flower and Hayes (1981) shows us, there are several ways of organizing a writing process. Surely, there is no such thing as **the** writing process. Nevertheless, only few researchers have tried to distinguish and describe frequent writing profiles. One of the basic distinctions made in the literature is the difference in writing profile between the so called 'Mozartians' and 'Beethovians'. 'Mozartians' are said to be extensive planners who formulate and revise their texts sentence by sentence. 'Beethovians' write a first draft of their text rather quickly with minimal revision and postpone the main revision for a second writing phase. Musicologists, however, do not completely agree with these descriptions.

In other research projects researchers focus mainly on characteristics of the person (writers being extrovert or introvert e.g.) or on the writing task itself.

In my research, I have opted for an approach which is not based on personal characteristics or elements of the writing task. My approach is based on a quantitative analysis of several variables used to describe the writing processes. The interplay of planning and revision behaviour holds a central position in this analysis.

I tried to distinguish a number of basic patterns along which the observed writing processes were organized. These basic patterns are called **writing profiles**. From this point of view, a writing profile is a description of the course and organization of the writing process on the basis of a number of distinctive categories (e.g. the distribution of

revisions, the duration of initial planning, etc.). The specific combination of these elements defines the writing profile.

The description of this writing typology consists of three sections. First, I will describe the way in which I constructed the writing typology. Second, I will describe the typology itself. I will end with an analysis of how computers influence writing profiles.

4.1. Method

To put together a writing typology I applied some advanced statistic methods on the data. I started from cluster analysis and refined the clusters making use of discriminant analysis. To cluster the 8C writing processes I selected eleven discriminatory variables, listed in table 2.

Typology	1	2	3	4	5	Ave
Revisions						
phase 1 (1)	81	76	89	34	82	77
phase 2 (10)	16	28	17	88	10	26
part 2	54	64	82	93	30	61
above word level (%)	35	38	38	54	28	37
total number	87	119	151	133	55	108
words revisions	10	7	7	6	15	9
Pauses						
initial planning (sec)	1310	332	235	824	319	448
total number	229	283	364	201	173	259
average duration (sec)	21	12	12	20	15	14
average time of pausing (min)	76	57	70	67	40	59
recursivity	62	79	105	33	42	68
Number of persons*	7	24	19	9	20	

Table 2 Quantitative description of writing profiles

* One extreme outlier was excluded from the analysis. Therefore the total number of persons is 79.

The cluster analysis resulted in a typology of five different writing profiles. These writing profiles cannot be placed on the continuity of one variable. Each profile consists of a well-defined combination of the selected variables. However, for the sake of clarity and manageability, I have tried to give each of the different groups a characteristic name. Although these names refer only to the most discriminatory variable of the group, they should be read as a definition of all variables of the group.

Profile 1: Initial Planners

This writing process is mainly characterized by a rather small number of revisions, most of them occurring in the second phase. The relatively longest initial planning phase is to be found at the beginning of the writing process. The average pause length is relative, since the longest and total pause times are significantly higher than the average.

Profile 2: Average Writers

The second writing process is closest to the average values of each of the variables of the total group. It can be viewed as a middle group in relation to which the other groups orient themselves.

Profile 3: Fragmentary First-phase Writers

The third profile is characterized by a revision attitude that concentrates heavily on the first phase of the writing process. Even though the total number of revisions is higher than that of other groups, the second phase of the writing process contains few revisions.

Time for initial planning is restricted. During writing, pauses are manifold and relatively short. The writing process is therefore strongly fragmented and characterized by a high degree of recursivity.

Profile 4: Second-phase Writers

In this profile we find writing processes in which revision is highly concentrated in the second writing phase. The revision allows for ample attention to changes above word level. Many revisions are made in relation to the number of words of the final text.

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Writers take time for initial planning. Once they start writing, they pause relatively little, but the pauses are relatively long. There is only a slight degree of recursivity.

Profile 5: Non-stop Writers

The writing process of the fifth group is characterized by relatively low values for most of the variables. This group revises least of all the groups. The relation between the number of revisions and the number of words is relatively high. In terms of percentage, fewer revisions are made in the second phase and the second part of the writing process. The share of revisions above word level remains small.

If we look at the pause attitude, we see that this group pauses less often than the other groups; the total pause time clearly lies below average. Additional analysis shows that processing time is shorter than that of other writing profiles. And little time is spent on initial planning.

In addition to this, we could raise the question: 'To which extent does the writing mode – computer or pen&paper – influence the organisation of the writing process?'

4.2. Writing profile and writing mode

Figure 2 shows us a graphic representation of the relationship between writing profile and writing mode. First, I will try to clarify the figure's system of notation. The box on the left represents a matrix with the writing profiles for the first experiment; the box on the right shows the shifts in the second experiment. The matrix is composed in such a way that two writing profile numbers can be determined for each person: for example, the number two in the matrix on the left (column 5, line 2) shows that two people in the first experiment fall under profile 2 when using the large screen. The same two people fall under the fifth profile when using the regular screen. The numbers on the left diagonal of the matrix refer to the number of people who do not switch writing profiles when changing writing modes.

Experiment 1						Experiment 2							
computer 25 lines						computer 25 lines							
	P	1	2	3	4	5		P	1	2	3	4	5
	1	1						1		2			
6	2	3	3			2	P	2		1	1		
6	3		3	3			P	3					
1	4							4		3	4		2
	5		1			4		5		1	4		1

Figure 2 Relationship between writing profile and writing mode

4.3. Distribution and shifts of writing profiles

Two facts are clearly expressed in the matrices above. On the one hand, we do not find one pen&paper writer in the third writing profile (fragmentary first phase writers). On the other hand, there are no computer writers in the fourth profile (second phase writers). Significantly, this fourth profile group is the dominant writing profile for the pen&paper writers: about half of the subjects belong to this profile group. The difference between both writing profiles (3 and 4) is relatively large and corresponds to a great extent to the difference between both modes based on the pause and revision analysis. The revision attitude of the fourth writing profile is, absolutely as well as relatively, highly geared towards the second phase of the writing process. In addition, we encounter more revisions above word level.

In the fourth writing profile, the initial planning phase is, on average, three times as long as that of the third group. The number of pauses spread over the writing process is much smaller and the average pause

length is longer. The degree of recursivity in the fourth writing profile proves much lower than that of the third profile.

We also notice that writers, especially during the second experiment, tend to adapt their writing profile to the writing mode. During the first experiment, shifts from one profile to another appear to occur less frequently. In this first experiment, writers used both regular and large computer screens. The figure clearly shows that the writing profiles are less often influenced by screen modes than by writing modes. More than half of the writers in the first experiment (11 persons out of 20, that is 55%) are true to the same writing profile in both modes. If shifts occur, they tend to be limited and only advance to a closely related cluster. We see in the figure that three profile-2 writers (average writers) move to profile 1 (initial planners) when using the 25-line screen instead of the 66-line screen. Both cluster and discriminant analyses show that profiles 1 and 2 are the most closely related clusters.

The matrix of the second experiment shows a completely different picture. Only two writers remain in the same writing profile when writing in the two different modes. This indicates that writers do not necessarily transfer their pen&paper profile to the computer mode. The extent to which they adapt their way of writing varies depending on their writing behaviour. Moreover, different writers adapt their manner of writing in different ways.

We see that pen&paper writers of the fourth profile (second phase writers), switch to either profiles 2, 3, or 5 when writing in the computer mode (see figure 1). All these shifts cause small or large changes in the typical writing behaviour of the fourth writing group. In general, the impact is greatest for those variables related to the second phase revision, the level of the revision, the degree of recursivity, and the initial planning.

Even most of the pen&paper writers who show a writing profile that is transferable to the computer mode (profiles 1, 2 and 5) tend to adjust their writing profile. The figure shows that 4 profile-5 writers out of 6 (non-stop writers) move to profile three (fragmentary writers) when using the computer. They are mainly writers who revise and pause less often, especially in the second writing phase. When writing on the

computer they shift to a writing profile in which the number of pauses and revisions increases. The total time of pausing increases greatly and the degree of recursivity doubles. The ratio of number of words/revision increases by 50%.

This analysis proves that most writers do not maintain their pen&paper writing profile when using the computer. The extent to which the writing process is influenced varies from person to person. We do notice that pen&paper writers leaning towards frequently occurring computer writing profiles adapt their writing profile less drastically.

5. Teaching how to write

The question that remains is, what do these research findings tell us about the teaching of writing. It goes without saying that we can no longer neglect the computer as a writing tool. In the early years of the personal computer – some ten years ago – people tended to compare the use of the computer with the use of language labs: promising at first sight. Today the computer has become the standard writing tool in business settings, and we know that the use of the computer as a writing tool can only increase in the future.

The research findings show us that the computer influences the way in which writers organize their writing processes. As teachers we should try to take into account these changes in writing behaviour and help our students adapt as adequately as possible to this writing medium.

This is not to say that the use of computers in our writing classes should be obligatory. We can also teach students to handle writing techniques and writing strategies that are useful when writing with a computer without actually using one (in a computer lab). Anyway, don't expect the computer to solve any writing problems at all. It is no doubt a wonderful tool that facilitates the writing process, but there are no research data that prove that the use of the computer itself improves the quality of the writing product.

I want to close this article with some short pieces of advice for the writing class.

- When you have the possibility to use computers in your writing class, try to integrate the teaching of word processing and the teaching of writing strategies. For instance, if you teach your students how to move a text block appropriately with a word processor, you can combine this technique with a writing exercise in which they have to combine topic related paragraphs using transition sentences and sentence combiners. In this approach computer operations are directly related to writing skills, like e.g. global text revision. Expertise in the use of advanced word processing techniques is not only for freaks, but can be really useful to edit and revise your texts efficiently. Be sure that you teach your students to make use of the full possibilities of a word processor, so that they are not going to use it as an ennobled typewriter.
- When you do **not** have the possibility to use computers in your writing classes try to focus on techniques that could be useful for your students when writing with a word processor later on.

a Focus on global text level

From the research we learned that computer writers tend to plan and revise more locally than when they write with pen and paper. This is a writing behaviour that in earlier research was identified as being typical for poorer writers. Although I would not like to jump to conclusions, I think it is important for our students that they learn how to attend to the global text level in a certain stage of writing. Exercises that focus on these skills, are important in any writing curriculum. They teach pupils how to remain aware of their off screen texts and how to revise and plan beyond the local level (i.e. the visible text on the screen in front of them).

b Explore writing profiles

In traditional writing instruction the three stage writing process was taught as a sacrosanct remedy for all writing problems: write an extensive text plan - write the text - revise the text.

From the description of the five dominant writing profiles, we learned that also professional writers organise their writing processes

differently. There is probably no such thing as the ideal writing profile. It also became clear from this analysis that writing profiles are greatly dependent on the writing mode used. A single individual will organize his or her writing assignment differently depending on the writing mode.

The implication of these findings is that we should teach our students to explore different writing profiles. We should teach them to find which tasks and in which situations certain writing profiles are more suitable than others. Timed writing exercises in which we force them, for instance, to write with and without planning give students the opportunity to explore these different writing approaches.

c Text design

The use of word processors and desk top publishers has given us the opportunity to apply different lay-out techniques to our texts. I think we should teach our students not to abuse, but to functionally integrate lay-out possibilities. Lay-out should be really more than a cosmetic veneer for texts. It should be an important way to show the textual hierarchy of a text. Headings, subheadings, bold, italics, enumeration devices, indents etc. help readers to orient themselves quickly in a text.

d Collaborative writing

Especially in business settings text production has evolved from an individual process to a community process in which different people participate in the text production in one stage or another. Computers and networked environments have facilitated collaborative writing. Giving feedback on written documents and incorporating feedback have become important writing skills that require an elaborated vision on writing in a social context. Peer review and functional text adaptations should become obligatory aspects of writing curricula.

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Generating strategy in writing

Christian Kock

Summary

The paper suggests that the best writing strategies for generating more and better content are really just written counterparts of behaviour patterns natural to speech. Some speculative reasons are suggested why speech may be, for some writers, a better tool for generating content. Given that, it would be reasonable to see how one can exploit this potential of speech directly - i.e., by speaking rather than by writing (a practice to be distinguished from dictation). In support of this idea, the paper offers three examples of student writers writing and then speaking on the same topic. Some practical applications of speech as a writing strategy are suggested, but there are problems as well, and further discussion and experimentation is called for.

1. Oral strategies

Linguistics and writing pedagogy alike emphasize the gulf between writing and speech. Few - among them some of the contributors to Hynds & Rubin 1990 - expressly acknowledge the **potential** of speech for writing.

The value of certain oral features in writing **style** has gained fairly widespread recognition, at least in the English-speaking world. Whale 1984 is a useful book that makes this point and deserves more attention. Much less discussed, however, and even less recognized than the possible advantages of oral style in writing are the ways in which speech can contribute to **content**. They are the focus of the present paper.

The documentation I shall offer will mainly be examples from student texts, compared with students' spoken explanations of the same topics as those covered in the texts. This is admittedly insufficient documentation. But to add plausibility to the notion that speech can supply powerful strategies for generating content, I will take an initial look at some of strategies that are in fact offered by writing teachers nowadays with the same purpose in mind.

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These strategies are indeed powerful. They are, in some form, central to many present-day textbooks, including one of which I am co-author (Kock & Tandrup 1989), so I am certainly not going to quarrel with them. They can be expressed with the following slogans: **Start now and keep going; Write in chunks; Start anywhere; Don't worry about language and mechanics while you write; Write more about your focus.**

One thing common to all of these is that they are versions of the same underlying 'master strategy' for a rational writing process: Don't try to juggle all the balls at the same time; it is better to juggle one ball at a time. In other words, they seek to reduce the cognitive overload that the many constraints and demands of writing place on the writer.

Another thing that these strategies have in common, however, is not often, if ever, recognized: they are essentially **written versions of behaviour typical of speech.**

'Oral' strategy no. 1: Start now and keep going

Peter Elbow in particular has made this strategy known under the name "freewriting" (1973, 1981). But no one has, to my knowledge, pointed out that what he recommends is a counterpart of what Freud and others have used for a hundred years in psychotherapy: let the patient **speak** freely, without interruption or worries about correctness, propriety or coherence. The idea is to produce as much text as possible, on the theory that valuable material will come out. The only advantage that freewriting has over 'freespeaking' is that what is written is saved so that one can start working with it. With a written text, however, one is easily tempted to worry about correctness and to revise, scratch out, or just get blocked. This is why freewriting exercises usually include injunctions to keep going, without such worries. In speech, these worries have much less power to block us; what is said is said and cannot be revised.

When thesis-writing students meet in cross-departmental writing groups at the Communication Skills Centre (Formidlingscentret) at the University of Copenhagen, they discuss their plans and drafts with a tape recorder running. Many times, valuable material does come out - especially from

the writers themselves in response to requests from group members to explain a point **now**. When writers take the tapes home, they often find that they can integrate parts of their own spoken explanations in their drafts with almost no revision.

'Oral' strategy no. 2: Start anywhere

This - one of my own favourites - is good advice for apprehensive writers, especially students who think they have to figure out the entire outline and content of their text before they can start drafting it. As a result, they feel that before they can start writing, they need to know exactly what their text is going to start with. As experienced writers know, precisely that is one of the hardest choices to make. It is better for most inexperienced writers to be forced to start writing **any** part of their developing text that they can think of - instead of pondering what to start with. As for structure, it is usually easier to impose once we have some prose on our desk on which we can impose it.

For example, in cross-departmental writing groups we may have graduate students of psychology who want to write about methods in psychotherapy. On request, they will usually narrate a few case stories that are pertinent to the subject; only they do not know the exact way in which they are pertinent or exactly where they belong in their text. Our typical advice to them is, "All right, for our next session write out one or two of those case stories. Later, you can think about where they belong. And later still, you can think about how your text is going to start."

What this strategy really does is to import an aspect of the way we speak into the way we write. In speech, it is natural to start off on a subject with anything, very often something like a case story, or some other type of anecdote, as our own associations or an interlocutor's promptings dictate. If, for example, someone asks us what we are working on, we cannot ponder for a long time where to start. So what we'll do is to start with anything - for example with a case or anecdote that has **something** to do with the matter.

Usually anecdotes or cases make up a great deal of the material covered in such conversations. If so, it is because our speech naturally obeys

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- another piece of advice in writing instruction: Use specifics to support what you say.

'Oral' strategy no. 3: Write in chunks

This means that we should not think about the entire text every time we write a chunk of it. This strategy, like "start anywhere", frees us from worrying about structure while we draft. We can worry about where to place the chunk *after* we wrote it. What experienced writers do is often to write chunks on separate sheets and then spread them out on a desk so that they can begin to see what goes where. Again, we see that by following this strategy we are simply doing what we do naturally in speech. In conversation, we speak in chunks, or as analysts of conversation say, in turns. We produce anywhere from one sentence to a couple of minutes' worth of talk in each turn; then it is the other person's turn. During this process, we worry about what the other person wants, or asks, or objects, not about structure.

'Oral' strategy no. 4: Don't worry about language and mechanics while you write

When we write, worrying about language is hard to avoid. Each sentence we write is there before our eyes, asking to be improved even before it is finished. Resisting the temptation to do so is hard because we have to monitor our output from time to time (i.e., read what we are writing) in order to write more; but at the same time, the monitoring (i.e., reading) of the text we produce may interfere with the output of new text: it is a complex task to read and write at the same time.

By contrast, when we speak we do not usually get caught up in the text we have just produced; we can never get it back or improve on it, so if it was not good enough, our only option is to produce more text. As for monitoring our spoken output, it is no problem to hear oneself and keep talking at the same time; rather, it is impossible to do only one of those things: we automatically hear ourselves, and this input probably acts as a

stimulus to new output rather than as an obstacle. What we hear ourselves say will often remind us of something else that we would also like to say.

This brings us to another classic piece of advice to inexperienced writers:

'Oral' strategy no. 5: Write more about your focus

It is hard to get students to do this. In my experience, even if we can teach them to revise more than superficially, they prefer to move parts around or delete them; they rarely add new material unless expressly told to.

But in speech, if we want to improve on what we have said, we have to say more. No revision is possible, whether superficial or profound. Any 'imperfect' sentence must be followed up with another sentence that attempts to say it in a better way, or add what was missing before. Also, under the right circumstances I believe speech will often get us to our focus faster (i.e., with less waffling) than writing, and once there we often find it easier to stay on focus longer, without getting derailed into side issues. 'The right circumstances' means that we have our central idea clearly in mind, and a motivating situation - for example, a keen audience or interlocutor in front of us. I have found inexpert writers much more prone to get sidetracked when they write than they are when they speak.

It seems, then, that some of the most powerful writing strategies for generating content are really just written duplicates of practices natural to speech. This means that inexperienced writers can already do a lot of the things that expert writers do - they can do them orally, that is. As writing teachers we exhort students to use writing strategies that many of them find strange or even shocking - but we forget to tell them that what we ask them to do is things they do every day when they speak.

2. Speech as a 'context generator'

2.1. Why it works: some speculations

In this discussion of writing strategies that are essentially oral, we may also have some parts of a speculative answer to the question why speech would be a better 'content generator', a better 'thinking machine' than

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writing. We may try to apply, loosely, the terminology of 'neural networks'. What we do when we think about an idea or a problem, then, may be that we try to make one central node ('idea') in our neural network pull strings to all sides to see what other nodes get activated by it. A more traditional way of saying this is that we try to generate as many associations as possible.

Speech is an ideal tool for this activity. When we speak, we hear our own voice. The actual hearing of our own words is a powerful stimulus. Spoken words - those of others or our own - automatically reverberate in the mind. Spoken phrasing and inflection - features of stress, pitch, speed, volume, pausation - help to give central words or ideas added reverberation. Spontaneous speech 'massages' the mind with a much broader array of stimuli than does written language. Every bit of spoken output immediately becomes fresh input for the mind, thereby increasing the chance that fresh thought - i.e., new associations in the neural network - will occur. We all know the feeling when, in conversation, each sentence we say seems automatically to trigger another; while speaking one sentence, we don't know what the next will contain, and yet, in its turn, it pops out of our mouth - sometimes bearing ideas that surprise even ourselves. E.M. Forster's often-quoted question "How do I know what I think until I see what I say?" describes this phenomenon well.

Another reason why speech may be a powerful content generator has also been mentioned already: we cannot revise what we have said but must go on producing more words until we feel that we have expressed the idea, or solved the problem, that we had in mind.

Fortunately, producing words in speech is easy work: most people, under the 'right circumstances', produce words at the rate of 2.3 words a second. No handwriter or typist could attain quite the same speed. Yet it seems a 'natural' working speed for the part of the brain that produces words. At that speed, we generally seem to have no problems monitoring our own output and thinking of more things to say.

By contrast, in writing the slow work of producing words may hamper us, and our attention may easily be derailed when we try to monitor our own output: we get annoyed by surface problems and begin to revise. We 'lose the thread' and veer away from our central issue.

A fourth factor is the conversational nature of speech. We have many years of practice in conversation; we are trained in interpreting listeners' signals and needs, even if they do not respond verbally. Because of this, we may find it easier to accommodate listeners' needs when we speak, even in monologue, than it is to meet readers' needs when we write.

Some theorists would probably say that only an **active** listener's presence can help us communicate better in speech than we do in writing. But teachers and lecturers know that even when the audience is passive, they often find themselves saying things that are better, in wording or content, than anything they have ever been able to write.

To sum up this speculative overview of why speech might have advantages as a writing strategy, we seem to have at least four possible factors: the **irreversibility** of speech that forces us forward; the ease of speech that lets us give full attention to the production of more words; the **'automatic monitoring'** that does not hamper us but helps trigger new associations; and our long-earned practice in speech of **sensing an audience's needs**, even if they do not speak.

2.2. Actual uses of speech to generate content

Since rational strategies for generating content in writing are to such an extent duplications of oral behaviour, it seems obvious to try to see what can be gained on the content level by not only duplicating but actually using oral behaviour **directly** as a writing tool.

One caveat is in place here. We are not talking about dictation - an interesting phenomenon in itself. Dictation means that one tries to produce **written** text, although in another medium; but what we are going to look at now is students who have been asked to produce **speech** about a certain topic, as in dozens of similar speech situations they have been involved in. They have not been asked to produce text for writing, and they have not been warned that the text will be used for that purpose. The only unusual thing about the situation, from their point of view, is that a small dictaphone is running - "just so that we can play it back".

Let us see, then, how a person 'writes', especially with regard to content, when she simply **speaks** her text instead of transcribing it. Here,

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it may be particularly instructive to look at situations in which the same person has written and spoken about the same subject.

The hypothesis is that on the **content** level the spoken version might well be better than the written one; we should not be surprised to find 'more' content in the spoken text. Similarly, we might well find that a non-expert writer's spoken text gets to its focus faster and stays on it longer.

Example 1:

As a first example, here is an excerpt from a conference with a student on her paper in an Advanced Expository Writing Class. The student, a major in Film and Media, is writing about the history of Danish film documentaries. As an influence on the genre, she wants to mention and in a brief paragraph summarize the ideas of a British filmmaker named Grierson - a kind of task students often have trouble with in writing. First, we get the passage about Grierson from her written draft (in translation):

Grierson felt that documentary film ought to show the unknown in the known. The real task of film was to open up for an experience and understanding of the world **near** to the audience as well as that **distant** from it. He felt that documentary films should have a bearing on society. The director should have knowledge of as well as familiarity with reality. He should master it in order to "narrate" it - through himself, through his film. Thereby the director would also acquire a social responsibility and a sociological sense.

In the conference, I asked the student what exactly the point was that she was trying to make about Grierson's views and their bearing on Danish filmmakers. She answered:

You know, what I wanted to say about him, he was Theodor Christensen's [a Danish filmmaker] guru, he wrote manifests on what he felt documentary film should stand for. And that was where Danish documentarists found their doctrine, see? And what Grierson said was that - that documentary film was first and foremost a reaction against the feature film, which dealt with the individual and

the individual's problems and emotions and so on, see? - whereas Grierson said that documentary film, that was the masses instead of the individual, see, it should have a bearing on society. He said that documentary film was to be like a cross-section of society.

The salient differences between these two passages lie, I believe, in two areas. On the one hand the written text is briefer (81 words compared to 100 in the spoken one), and it lacks the padding, the tags, loose ends, groping repetitions, etc., characteristic of the spoken text. It is syntactically well-formed, whereas the spoken text has a few flaws like incorrect word order, faulty agreement, etc.

On the other hand few would feel very enlightened by the written text. It waffles a great deal, offering characterizations that become all-inclusive and thus vacuous ("the world near to it as well as that distant from it"), conceptual pairs with no clear difference ("knowledge of as well as familiarity with"), and more. If we ask ourselves in what general direction Grierson's effort went, all that really helps us a little is the reference in the final sentence to a social responsibility and a sociological sense. However, this does not say much about what Grierson wanted the documentary film itself to be like.

On that level, the spoken version is clearly superior. (It is worth adding that as I asked the student to tell me what she was trying to say about Grierson, she inadvertently looked down at her script, whereupon I asked her not to - could she just look at me and tell me what the point was about Grierson.) After a few groping sentences she comes up with the contrast between feature films (which focus on individuals) and documentaries (which focus on the masses).

It is striking that she had not used this illuminating contrast in her paper (which had cost her hours and hours of work, mainly spent on focusing and narrowing down the subject). Centered around this focal point, the other bits of information in the passage fall into place.

It would be easy to edit the spoken text so that it becomes a better piece of writing than the script. One attempt at such editing is the following (words in sharp parentheses are interpolated):

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Grierson wrote manifests on what documentary film should stand for, and that was where Danish documentarists found their doctrine. Documentary film was first and foremost a reaction against the feature film, which dealt with the individual and the individual's problems and emotions, whereas documentary film was [about] the masses instead of the individual. [Documentary film] should have a bearing on society and be like a cross-section of [it].

Here, we are down to 69 words - 85 % of the original written version, and two thirds of the spoken one. The editing consists of: a) deletion of tags, false starts, needless repetitions, and unnecessary words; b) introduction of punctuation marks, and c) interpolation of a couple of words. The passage does not attempt elegance, but it gets straight to the central idea that the writer wants to put across and explains it fully yet succinctly.

Example 2:

I would not quote the above example if it were not representative of a number of similar cases. The next one is from a seminar on written communication for Ph.D. students at the Technical University of Denmark. The group had been asked to prepare half-page written explanations of their dissertation projects, to be read by an (imagined) superior with a non-technological background. One student's written text, in translation, went as follows:

The strategy concerning Denmark's water resources has long been in a process of change, but this has not been reflected in the rules regulating water installations in our residential areas. Therefore, the Building Research Institute has undertaken to investigate how water installations may be structured in the future so that the change in the supply situation may be taken into account.

The project includes an assessment of what water resources may in practice be utilized in residential areas. Also, information will be gathered on water consumption and the influence of various factors on this. The result of the analysis will finally form the basis of the formulation of a set of strategies for modifying the structure of these installations so that they will correspond to the modified supply conditions.

Already much information has been obtained on water consumption. 35 housing blocks in Copenhagen are included in the study, in which existing installations are registered and cross-tabulated with numbers of occupants and water consumption. These registrations are based, among other things, on flow in installations and the amount of flush water in toilets. Results from this part of the study will appear in the autumn.

Without discussing the script or looking at it, the student and I had the following conversation, beginning with my asking what she was working on, and why:

Well, the project I'm involved in at the Building Research Institute - I'm working with, you know, water consumption in homes. And I'm doing it because there is a water shortage in Denmark, in some places, not in others though, and because for many years water consumption has been, like, up, it's grown a lot. And so we're trying to figure out why it has grown. And what are we using the water for? And how can we reduce it - get less consumption?

What specific places are you investigating, what are you doing specifically, it sounds like a very big question?

Well it is. You know, we, everybody, these years, they all get this folder from their local water works, saying now we should save water. And today they use 200 litres or something like that in the household. But no one ever did that. That's very interesting. Yet it says everywhere that we use 200 litres for each person. But nobody - well, in some places they do claim that they use that. But then they must be at home a lot, because we can't find anyone that uses that much, when we start measuring it.

So maybe there is no problem after all?

Well, look at nature, you can see there is a problem. So we've got to reduce it. But first we have to find out what we're using it for, because we can't go out and say, now everybody's got to get new toilets. If that is not where all this water is used, there's no need to get new ones. But look at nature, you can see that lakes are being drained, or -

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OK, so we have to find out where in fact all this water is running -

Yeah.

And it's not the daily shower or - ?

Well, it might be. We don't know. Of course we use a lot of water in showers. But we also use a lot in toilets. And then there's a great deal of leakage, you know, I mean like running toilets.

And all, this, in fact we don't know where it's going, where -

That's it. Right now we don't know what we're using it for.

It is clear that in the conversation, the student produces text that is more understandable, more persuasive, and most importantly: she produces more content. Much of what she says is not in the script. Yet some of it is crucial to an understanding of the project: the fact that there is a water shortage problem, and the fact we just don't know what all the water apparently used in households is actually used for. That these content elements should be omitted in the written version is much more interesting and disturbing than the fact that the writing is heavy with bureaucratic jargon.

It would be easy to produce a perfectly informative and functional script by putting together bits and pieces of the student's answers to my questions. We will perform that experiment with the last example, from the same seminar.

Here, the student's script, despite the injunction to write for a non-technical reader, was so full of opaque specialist terminology that there is no point in printing it here. It is enough to say that even so, the main finding occupied about half a line of text out of 15, and its implications were not even mentioned.

The following conversation took place. I began by asking the student to imagine that the dictaphone in front of him were a telephone, and that he was talking to a friend or relative:

Example 3:

So what are you trying to find out and why?

I want like to connect optical conductors in a way so you can transmit - when you connect optical conductors, it should be possible to transmit - possible to - the signals you transmit through the optical conductors, I want to steer them by means of different, **different**, conductors

Aha

I mean a kind of Y, a kind of roadfork

Aha - so the light is, can be, kind of, distributed, forked out in the roadfork -

Yes, a bifurcation, yes -

Go on - you want to steer them?

Yes, I want to be able to choose which conductor it should hit -

Aha - that's what's called optical switching?

That's it exactly, yes - that's the applied phase of it

Right - and they haven't been able to do that until now or what?

Not so well.

Not so well? What, why, what's the key reason why you think you can do it better, or - what would cause that improvement, what's the key to it?

It all happens optically rather than electronically, and therefore faster.

"It all happens optically rather than" ... what does that imply?

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That there is no translation from light to electricity and back again.
It all happens by means of light.

What do you do - how do you intervene in order to get your
switching to work?

I have a certain medium which behaves such that the light bends in a
way I can control.

How can you control it?

By increasing or decreasing it, the intensity of the beam I'm sending
in.

Aha -

With greater light intensity, the beam bends more.

Right - and what are the implications, what are the perspectives, if
you succeed?

Optical switching, that's what it is for.

But what benefit or cost reduction or improvement or use do you
see? as a perspective?

Basic research ... ?

But it sounds extremely practical to me -

(Another student:) Surely you must gain speed by not having to
translate it to electronics and back into light?

Well, there is a greater width of the band - that is, it can handle, I
can, er, distribute more signals at the same time than I used to.

And by giving a certain signal a certain intensity, you can make it
bend in a certain direction ... ? Thank you.

The following is a condensed version of what the students says:

I want to connect optical conductors in a way so that the signals you transmit can be steered by means of *different* conductors - a kind of roadfork. I want to be able to choose which conductor the signal should hit. It all happens optically rather than electronically, and therefore faster. There is no translation from light to electricity and back again; it all happens by means of light. I have a medium which behaves such that the light bends in a way I can control by increasing or decreasing the intensity of the beam I send in. With greater light intensity, the beam bends more. I can distribute more signals at the same time than I used to.

3. Perspectives and problems

The last example should need little comment. The spoken and edited text, although slightly abrupt, is informative, to the point, and actually makes quite clear, to me at least, what this high-tech project aims to do, and how.

The point here is not to claim that these writers *could* not write as well as they speak; the point is that that they *do* not. But at the same time I claim that they definitely *could*; they would only have to adopt a different writing strategy from the one that they have apparently been conditioned to - one in which they would, as it were, tap the tube from which speech would ordinarily flow.

A further claim is that in some way, tapping the tube of speech is precisely what many expert writers do - only they do it in a way that does not involve overt speech behaviour. Of course such a claim is difficult to test empirically; for the moment an interesting statement from one expert writer may suffice to give the claim some plausibility.

Hans Christian Andersen in his memoirs, *The Fairy-Tale of My Life*, Ch. 10, describes his composing strategy as follows: "I had put my little tales on paper in just the same language, with the same expressions, in which I had orally told them to the little ones." What this means is that Andersen wrote his tales by speaking them first, probably several times, in monologue. Although he did have an audience, it is unlikely that the

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audience prompted him verbally. The way they did prompt him with was probably on the level of body language, and by simply causing him to muster his resources.

In a sense, then, it might seem that we may have struck a pedagogical gold ore. The problem is to bring out the gold: how to exploit the capacity for rational writing behaviour that lies hidden in a person's capacity for speech.

For individual writers, we should look for ways in which students can produce texts that are better, perhaps in less time or in greater quantity, by using speech in some form at some stage in the process. For pedagogy, we should explore ways to teach useful writing strategies by practicing the spoken counterparts of these strategies during classes and conferences.

However, the actual implementation of the principle is anything but easy. The first problem is that although getting spoken words out may not be hard, getting them down on paper is. When we write the words are preserved, to be either revised or published. Spoken words blow in the wind. In this sense we produce no writing no matter how much we speak; at some point an act of transcription has to take place, even if we preserve our speech on tape or the like. But literal transcription of taped spontaneous speech, as in the above examples, is so time-consuming that few will want to go through with it.

A more fundamental problem is that no use of speech as a writing tool exempts a writer from those demanding tasks that any expert writer faces: those of detection, diagnosis and applying strategies for revision - to use the terms of Flower et al. (1986). What speech as a writing tool may produce for some writers is no more and no less than better raw material - better on the content level, and, one might add, on the linguistic level too, in many cases. But no more than raw material. Speech may offer inexperienced writers methods of "procedural facilitation" (cf. Bereiter and Scardamalia 1987); but the transformation of speech into a presentable prose text requires as much expertise as the transformation of a written draft. Given the highly associative nature of speech - which is precisely what the principle seeks to exploit - spoken raw material is likely to be less organized as far as structure is concerned than a written draft,

although the hypothesis is that it will cut through the heart of the matter more - criss-cross-wise, as it were.

In the examples given above, the speakers do not produce better written texts all by themselves; they are prompted to speak in varying degrees, and the transcripts of their spoken utterances have been edited by the same experienced writer who does the prompting.

In spite of these two major problems there may for some writers be a very specific advantage in using speech as raw material: namely writers who have major problems with transcription itself. Dyslexia, physical disabilities, or just a cramped handwriting prevent many writers from producing enough raw material to get started.

For the average writer, the use of speech in daily writing practice will probably have to be a matter of individually developed habits. For some, a useful habit may simply be, at difficult spots during a writing task, to half-close their eyes and ask themselves, "What would I say here if I were to say it to someone rather than write it?" It would thus be a means of producing more and better content locally; for structure and other global concerns, paper remains the supreme medium.

Few would probably use tape recorders or the like. In particular, the work of transcribing and structuring scattered spoken material is prohibitive. However, in situations where the writer has not only a great deal of content but also a clear structure in mind, tape recording may be a practical strategy.

One version of this is a practice I have used in writing seminars for engineers, architects, and other professionals who wanted to improve their letter-writing skills. With an outline jotted down on a sheet in front of them, they would pick up a dictaphone and, pretending it to be a phone with the addressee at the other end, speak the content of the letter they were about to write. This text could then be transcribed and edited into eminently functional prose merely by deleting some words and adding punctuation and paragraphing.

As for new practices in writing pedagogy that exploit the content-generating potential of speech, they already exist. Some of the most interesting pedagogical activities that writing pedagogy has explored in recent years are of this kind - a fact which their originators are of course

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aware of, but which they have generally not seen as central to these activities, or as any part of the reason why they work.

One example are inquiry activities such as those explored and advocated by George Hillocks of the University of Chicago and his associates - as, for example, in Hillocks 1979. Average students doing oral group inquiry are heard to produce observations, distinctions, arguments, refutations, etc., of a quality that any writing teacher would be jubilant to find in their scripts.

Another even more recent example is the pedagogical practice known as Collaborative Planning, introduced by Linda Flower of Carnegie Mellon University and her associates (cf. Flower et al. 1993). It is true that the 'social' nature of this activity will go a long way towards explaining its helpfulness for rhetorically inexperienced writers; but I am equally convinced that another part of the explanation is the fact that Collaborative Planning asks such writers to speak rather than write. (It is interesting that a computer program developed for Macintosh by Thomas Hajduk of Carnegie Mellon University, *Planner's Options*, exploits this concept by having the 'supporter' asking the writer questions and the writer answer them at the computer - so that they can immediately be entered.)

A related perspective is that recent word processing programs, e.g. *WordPerfect* version 6.0, include the option of integrating a sound file anywhere in a word processing file. One way to exploit this facility would be to have conferences like the ones quoted above take place at the computer with the student's text open; and whenever the student had a worthwhile spoken addition to make to a passage in her own text, it could be recorded into the file at that spot, thereby saving it for later transcription and editing.

However that may be, I hope the present examples and speculations have added substance to the idea expressed by James Britton, that "talk is the sea upon which all else floats". Expert writers, I believe, are aware of this and they have found their individual ways of tapping that vast source - sometimes so smoothly that we do not notice they are doing it. We should look for ways to teach inexperienced writers the same awareness.

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What do we know about writing processes in L2? The state of the art

Hans P. Krings

Summary

Whereas L1-related text production research has made great progress in the last few years, there have been very few studies of L2-related text production. We have a particular lack of information on the psycholinguistic processes going on in the heads of learners when they write foreign-language texts. This article gives an overview of nine empirical studies from various countries which concentrate on this topic. After a short introduction, Part 2 gives an overview of the different methods employed. Part 3 presents the results of the studies in systematic form. Finally, Part 4 gives a summary and discusses the possible impact of the research results on foreign language teaching.

1. Introduction: foreign-language writing processes as a subject of research

Writing is without doubt the aspect of foreign-language competence which is most heavily neglected by research into foreign language learning (such as speaking, reading or translating). There are extremely few studies of how writing competence in a foreign language is organized, how it is acquired, how it differs from individual to individual, how important it is in relation to other elements of foreign-language competence, which role is played by the mother tongue in foreign-language writing etc. (for details of this lack of research, see Krashen 1984:40ff.). Not until very recently have there been increasing attempts to make writing in a foreign language a subject of systematic empirical research. Following a general trend in research into foreign-language learning, these attempts focus on the underlying mental processes. The subject is thus no longer primarily the product of writing, but the way leading there, i.e., the writing process.

In this paper, I would like to give a summary of the few empirical studies dealing with foreign-language writing processes. In addition to the problems and methods, I will describe the results achieved up to now.

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I would like to delimit the subject of this paper as follows: I am dealing exclusively with empirical studies of writing processes in a foreign language here. This means that no space will be given to work on mother-tongue writing processes, work dealing with foreign-language text production from a purely theoretical point of view or work on other than the processual aspects of foreign-language writing, for example questions of the acquisition and teaching of writing competence. However, my discussion will show that the results of research into writing processes are of immediate significance for the learning and teaching of foreign-language writing as a whole.

On the following pages, I would first like to give a summary of the studies I evaluated and the data on which they were based (Section 2). In the main section, I will present a list of problems of research into foreign-language writing processes and give the results achieved up to now (Section 3). The paper closes with some details on the perspectives for further research.

Börner 1989

N: 4

TP: French students at Hamburg University

L1: German

L2: French

TPT: "Fictive portrait with biographical additions" inspired by drawings of "types of people to be found in the teenage scene" with commentary

Meth: Computer protocol, retrospective verbalization

Dam/Legenhausen/Wolff 1990

- N: 17 groups of 2 to 4 pupils
TP: German secondary school pupils, German high school pupils,
Danish combined school with 3 to 6 years of English instruction
L1: German, Danish
L2: English
TPT: Texts chosen by the pupils themselves, written partly by PC and
partly using pencil and paper
Meth: Protocols of group discussions; video recordings of the monitor

Friedlander 1987

- N: 6
TP: Advanced learners of English
L1: Chinese
L2: English
TPT: Letters
Meth: Thinking aloud

Königs 1988

- N: 4
TP: Students of Spanish at Bochum University
L1: German
L2: Spanish
TPT: Texts for a travel brochure on Munich inspired by photographs
Meth: Thinking aloud, interviews

Krings 1986

- N: 4
TP: Students of French at Bochum University
L1: German
L2: French
TPT: Letters of application for a position as au pair in France in
response to a newspaper advertisement
Meth: Thinking aloud

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Krings 1989

N: 9
TP: Students of the various languages: foreigners and bilinguals living in Germany
L1: German, English, French, Italian, Spanish
L2: German, English, French, Italian, Spanish
TPT: Verbalization of stories told in pictures
Meth: Thinking aloud

Zamel 1982

N: 8
VP: Students of various subjects at the University of Massachusetts, Boston
L1: Japanese, Spanish, Arabian (2x), Italian (2x), Greek (2x)
L2: English
TPT: Unknown
Meth: Interviews

Zanel 1983

N: 6
VP: Participants in an "intermediate composition class"
L1: Chinese, Hebrew, Persian, Portuguese, Spanish
L2: English
TPT: "Essays that were based on a set of thematically related readings"
Meth: Thinking aloud

Zimmermann 1992

N: 21
VP: Students of English
L1: German
L2: English
TPT: Retelling the "Pear Story" by Chafic
Meth: Thinking aloud

Abbreviations

N	Number of subjects
TP	Type of subjects
L1	Mother tongue of subjects
L2	Foreign language in which texts were written
TPT:	Text production task
Meth	Method of data collection

Table 1 *Synopsis. Empirical work on the writing process -*

2. Summary of the empirical studies

Table 1 gives a synopsis of nine empirical studies of foreign-language writing processes and the most important characteristics of the design in question (number of subjects, type of subjects, mother tongue of subjects, foreign language in which texts were written, text production task and method of data collection). These are the only empirical studies known to me which deal directly with foreign-language writing processes. The study by Friedlander, an unpublished dissertation for the Carnegie-Mellon University in Pittsburgh, is the only study to which I have no direct access. I acquired my information of it from a review in a more recent article by Hayes (1989).

The table immediately shows that the number of subjects used in most studies was relatively small: in the case of seven of the studies, it was fewer than ten. The principal reason for this is the effort required by the application of introspective methods, especially thinking aloud. In view of the small amount of data on which the studies are based, the results do not permit excessive generalization, a fact which is expressly granted by most of the authors concerned. With the exception of the study by Dam/Legenhausen/Wolff, who worked with pupils from various different types of school in Germany and Denmark, all subjects were students of the university at which the researcher in question taught. This is understandable in view of the not always easy task of finding voluntary subjects, but it must be taken into account when interpreting the results: these could be more valid for academically trained learners with an

exceptional interest in foreign languages than for average learners of foreign languages in schools.

The number of foreign languages to which the examined writing processes relate is at present 5, whereby English was the most frequent foreign language (6 times), followed by French (3 times), Spanish (2 times) and German and Italian (once each). The number of mother tongues of the participating subjects is clearly higher, especially in the study by Zamel, who recruited her subjects from multinational English classes at the University of Massachusetts.

Table 1 also shows that the text production tasks used in the studies were very diverse (letters, tourist brochures, letters of application, retelling etc.). One can assume that the type of writing task has a direct effect on the structure of the writing processes. The results of the studies will thus be at least partially text-specific. However, there is as yet no direct experimental study of the influence of the writing task on the writing processes involved (for the field of mother-tongue text production, however, see the interesting study by Matsushashi 1981). The most important differences between the studies compared here are to be found in the field of empirical design. Five of the nine studies use the method of **thinking aloud**. This method arose in psychology at the turn of the century but lay dormant until recently, when it was taken up again and developed. With this method the subjects are, as far as possible, to speak aloud all thoughts going through their heads while carrying out the task (for a systematic theoretical discussion see especially Ericsson/Simon 1984). These **verbalizations** are recorded on tape, transcribed into so-called **think-aloud protocols** (TAPs), and evaluated according to certain criteria which are independent of the question asked. Like every method of data collection, thinking aloud has its own specific strengths and weaknesses, but these cannot be dealt with here. (See also Grotjahn 1987; for a very critical assessment see Seliger 1983; the complete range of application of introspective methods in research into language teaching and learning is documented in the volume edited by Færch & Kasper 1987.)

An especially interesting method of data collection is used by Bömer (1989). The text production task was carried out directly at a personal

computer, with the aid of a word processing program written by the experimenter himself for the purposes of research into the teaching of writing. For the purposes of data collection, the system has an **echo function**, i.e. it "successively stores writing progress with all deletion, addition and correction loops etc. without affecting the writing process". After completion of text production, this echo function allows all separate steps to be reconstructed completely and systematically in their original sequence and made visible again on the monitor (cursor movements, delete, insert, scroll, change window, format, help search etc.). Also, the program automatically records the time elapsing between all successive activations of the input keys as soon as a minimum period of two seconds, defined beforehand, is exceeded. The result, unnoticed by the subjects, is a detailed computer protocol of the text production process which represents a valuable data basis for the analysis of these processes. Börner also uses the echo function of his program for the acquisition of **retrospective verbal data**. Thus, directly after completion of the text, the echo function was used to show the subjects step by step how the text came into being, including the lengths of the pauses between key activation. They had to say "what they remembered spontaneously", but were "not to make any attempts at systematic reconstruction". The experimenter also asked questions. These retrospective verbalizations were recorded on tape and served, together with the computer protocols of the writing processes, as a basis for data analysis. It goes without saying that this method can only be used with subjects who are acquainted with at least the rudiments of word processing. Otherwise, writing problems cannot be distinguished from problems of program use when interpreting data, especially the pauses.

In comparison with this refined method of data collection, the methods used by Zamel in her studies seem almost obsolete. In her first study (1982), she restricts herself to **interviews** in which she asks the subjects to describe their normal writing procedure. In her second study (1983), the interviews are supplemented by **observation** of the writing processes, but without documenting these in any form, for instance in the form of video recordings, which would have been the natural thing to do. As no clear information can be given as to the method of observation

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(were protocols of the observations made?), the interviewing method (which questions were asked?) or the methods of data analysis, we can assume that both studies by Zamel were carried out in an altogether unsystematic way and in many points do not fulfil the standard requirements for systematic empirical research.

The studies by Zimmermann and Dam/Legenhausen/Wolff are in a special position as regards the objectives of research and the methods of data collection used. Zimmermann (1992) does not have a general interest in describing foreign-language writing processes, but a specific one in

the relation between oral and written narratives of Chafe's *Pear Story* film, in particular the influence of oral L1 and L2 versions on subsequent L2 narratives written by the same subjects; in addition, it goes into the influence of the L1 on L2 versions in general (p. 467).

This special aim explains the relatively complex test arrangement, in which different groups retell, orally and in writing, in German and in English, and in differing order, the so-called 'Pear Story' (a silent film especially developed by the American language production researcher William Chafe for the purpose of data collection in this field). Thinking aloud is naturally only used in written retelling. The use of dialogue protocols is also planned. Text production is carried out in groups of two. The resulting **text production discourses** are recorded on tape and serve as a data basis. For information on the use of this method in the field of mother-tongue text production see Antos 1984, Dausendschön-Gay/Gülich/Krafft 1992; in translatology, this method has been used for a while now by Kußmaul 1989 and Krings (forthcoming).

The study by Dam/Legenhausen/Wolff also has a specific aim: what influence does the computer have on foreign-language writing? Writing is carried out as a group activity here, with a group size of two to four pupils. Like Zimmermann's dialogue protocols, the **group discussions** serve as a data basis. This is supplemented by video recordings of the screen. In addition to empirical research into writing processes, this publication focuses on the recommendation, which is directed more at teaching methods,

that producing texts in small groups is one of the more efficient ways to promote writing abilities, and that it is also, at the same time, an excellent interactional activity (p. 325).

To sum up, we can say that the few empirical studies mostly work with small groups of subjects who are usually students at a university. Up to now, five foreign languages and a larger number of different mother tongues have been taken into account. The range of the text production tasks is already very wide. Thinking aloud dominates in the methodical techniques. In addition, however, retrospective verbalization, dialogue and group protocols as well as interviews are used. Computer protocols are chosen when writing processes at the PC are to be documented.

3. Objectives and results of research

In the remaining part of the article, I would like to try to sum up the results of the research carried out up to now in synoptical form. I will do this by presenting the results as a function of each objective of research. This list does not pretend to be complete, but it does on the whole take into account the most important aspects not only of the work already done, but also of future research in this field. In this way it is also a general programme of empirical research into foreign-language writing processes. It is obvious that, for most questions, there are only very few answers, and that for some, there are no results at all. Of course, the results can only be represented in a concise fashion here and cannot be systematically derived and justified. Let us also remember here that, at the present state of research, the available results cannot be generalized without running into problems.

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(1) Subprocesses

How do learners approach the complex task of producing a written text in a foreign language and what subprocesses can we observe?

We know from research into mother-tongue writing processes that writing is usually not a linear process but a complex, hierarchically structured one characterized by a high degree of discontinuity as far as time is concerned. This discontinuity is mostly caused by the insertion of planning phases, in which planning processes of differing scope and complexity take place. This process is characterized by a constant oscillating between content planning and its linguistic realization on the one hand, and the constant change between retrospective monitoring of what one has already written and prospective planning of what is to be written on the other. According to the results achieved up to now, this fundamental characterization is also true for foreign-language writing processes. The basic structure of the planning processes can be represented on a two-dimensional plane: the planning processes have a left-right dynamic on the syntagmatic axis which corresponds to linear progress in the text, and an above-below dynamic on the paradigmatic axis which corresponds to the hierarchical progression from general plans to more and more specific plans. This structure can also be represented well in graphical form (see also the sentence production diagram in Krings 1989:404).

Pauses are the most important indicators for planning processes. They are practically omnipresent in writing processes. In mother-tongue text production, a pause share of up to nine tenths of the total time needed to produce the text was observed (see also Krings 1989:404). On average, the pause time was equal to about half of the text production time. This also seems to be the tendency in foreign-language text production. Thus, in my 1986 study, the percentage of unfilled pauses of at least three seconds duration were between 16 and 53 per cent depending on the subject, although the method of thinking aloud was used and we can assume that many pauses did not appear to be pauses because they were filled by verbalizations. In the study by Börner, in which thinking aloud was not used, the pause share, depending on the subject involved, was

between 53 and 71 per cent, and the average pause duration was between 15 and 28 seconds (1989:50). In his data, the text production rate was between 2.4 and 4.9 words per minute, whereas in my thinking aloud data, the text production rate lay between 1.7 and 3.7 words per minute, a fact which points to a distinct slowing-down effect of thinking aloud on writing processes (even more so considering that Börner's subjects had to write the text on a computer with a word processing system with which they were not familiar).

In his study, Börner found out that the planning processes are strongly centred on the sentence level. The planning phases observed corresponded to a high degree with the linguistic and structural organization of the text in sentences and clauses. Below the sentence level, however, the relationship between the linguistic structure of the sentences and the planning behaviour was more ambiguous: pauses often, but by no means always, occur at syntactically defined positions in the sentence. With regard to the length of planning units of this kind, Börner observed clear upper limits for the length of text passages produced as a unit, i.e. without pauses. These are usually present in the form of sentence or clause limits. Typically, also, there are no pauses within certain syntactical structures, which can thus be seen as often belonging to the same planning units, for example article + noun, possessive pronoun + noun, auxiliary verb + participle in compound tenses etc. Börner described his corpus as being too small to make detailed statements on type and length of planning units in writing processes.

With regard to the planning of content, Zamel reports that the writers she interviewed attached great importance to the classroom discussions of the subject in question for finding ideas during writing. Subjects which had not been discussed in the classroom beforehand, when given as a writing task, gave rise to frustration (1982:199f.). Only one of those interviewed said that, when planning the content, he started with a written representation of how the text should be organized. The others managed with more unsystematic notes or with no prior planning whatsoever.

Especially interesting and possibly of significance for assessing the validity of introspective data is Zamel's observation that many of the students interviewed said they talked to themselves during the writing

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process. "It's through talking to myself that I learn what I'm going to say", one of them explained (1982:201).

Like mother-tongue text production, foreign-language text production also consists of a number of other subprocesses in addition to the planning phase. These especially include reviewing or rescanning, monitoring, editing and revising as well as writing in the strict sense, i.e. the motoric activity. However, these subprocesses have not been studied systematically for the field of foreign-language text production. A number of scattered observations can be found in Zamel, though. According to her observations for example, revisions principally occurred after relatively long interruptions of the writing process. (The writing processes which she observed lasted up to 16 hours and were divided into several sittings.) She explains this with the fact that the interruption gave the writers the opportunity to gain some distance to the product of their own writing and to be more able, when re-reading it, to assess it through the eyes of the potential reader. She also observed that the revision of a certain passage was often preceded by reading the passage in question aloud. Perhaps this is the reason why reading aloud gives us a stronger opportunity to make sure of the quality of what we have already written, "as if hearing it spoken meant 'seeing' it in a new and more removed way" (1983:174). However, Zamel does not back up her observations by means of statistics.

A number of further observations concerning the individual subprocesses, especially planning, are to be found under the more specific headings below.

(2) Problems

What linguistic and non-linguistic problems occur in foreign-language text production processes?

Many studies show that writing is on the whole a process which bristles with problems and demands great cognitive effort from the writer. In my studies of 1986 and 1989, I attempted to specify these problems so that they could be quantified, but only with regard to the foreign-language component of the writing process (see tables 3 and 4 in Krings 1989:417 and 418). With the aid of a special system of indicators, the problems of foreign-language realization which interrupt the actual process of

planning the content and temporarily direct the attention of the text producer towards the foreign language were identified, classified and quantified. In this way, I was able to calculate the relative problem density by putting the problems in relation to the length of the produced text. The problem density varied between a ratio of one problem to 5.4 words and of one problem to 14.1 words in the produced text. We can very roughly say that my data show that, for each 10 words of produced text, a problem of L2 competence occurred which had nothing to do with the planning of text content.

A classification of the individual problems in the text showed that the entire spectrum of possible L2 problems occurred, i.e. from simple problems of spelling (for example: is *plu* as the participle of *plaire* written with or without an accent?) to complex problems of text pragmatics (for example: is it appropriate to conclude a letter of application for a position as au-pair with *toutes mes amitiés?*), but that a strong concentration in the field of lexico-semantic problems could be observed. One can very roughly say that at least half of the observed problems were lexical problems in the widest sense. Inversely, the very low proportion of usual grammatical problems was noticeable. Without giving individual figures, Börner reached a similar result in his study (1989:55ff.).

(3) Strategies

What strategies do the learners employ in order to solve these problems?

Research into the teaching and learning of languages usually considers strategies as cognitive plans for solving problems (for a more detailed representation of the concept of strategies see Færch & Kasper 1983a and 1983b). To my knowledge, systematic analyses of the use of strategies in foreign-language writing processes only exist for the complex of strategies for the use of reference books. My study of 1986 showed a strong dominance of the bilingual dictionary. This is used 5.5 times more often than the monolingual dictionary (44 consultations as against 8 for the monolingual dictionary). A grammar was used only once, a fact which is probably linked to the infrequent occurrence of grammatical problems

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in the writing processes (see above). In 69 per cent of the cases, the bilingual dictionary was consulted in order to find a foreign-language equivalent for a planned mother-tongue item which the subjects could not reproduce in the foreign language. In 25 per cent of the cases, the subjects had a probable equivalent in mind, but found it necessary to check its adequacy by means of the bilingual dictionary. All other forms of the use of reference works were negligible.

Some further results on strategies for the use of reference works are to be found under (7).

(4) Knowledge

How do linguistic and non-linguistic knowledge structures interact in the foreign-language text production process?

To my knowledge, there are no systematic observations which could answer this question (for the field of mother-tongue text production, see the results described in Krings 1992).

(5) Role of the mother tongue

What role does the mother tongue play in directing the planning processes?

The investigation of this important question has been given special attention in the past. There are already a number of interesting individual results.

In the interviews by Zamel (1982), one of students stated that she often wrote the text in her mother tongue first and then translated it into the foreign language. Interestingly, this writer was the best among the subjects. The others who were questioned always write in the foreign language immediately, but note down words in their mother tongue when they do not know the foreign-language equivalent. They do this principally in order not to lose their train of thought owing to the problem of foreign-language realization.

In order to specify more exactly the role of the mother tongue in directing the planning processes, I calculated the distribution of all planning units with regard to mother tongue and foreign language in my study of 1986. Of the total of 485 planning units, 40 per cent were

verbalized in the mother tongue, although this was an exclusively foreign-language text production task. In the course of the subsequent writing process, these units were replaced by foreign-language units. In my opinion, this result is evidence of the strong role of the mother tongue in directing foreign-language writing processes.

I have also tried to confirm this hypothesis by comparing foreign-language writing processes with the processes taking place when translating a text into a foreign language (cf. Krings 1987). Detailed studies of the strategies by means of which L2 problems were solved when translating in both directions showed that, typologically and in their quantitative distribution, these correspond largely to the strategies for solving L2 problems in free foreign-language text production. In short: not knowing how to translate a mother-tongue expression into the foreign language very probably leads to the same basic strategies, whether it stems from an existing mother-tongue text or from one's own need to express oneself.

Zimmermann (1992) also assumes that the mother tongue plays an important role in directing foreign-language planning processes:

For at least some informants we can assume silent formulations of narrative events in the L1 before the corresponding utterances in the first English version are produced (p. 485f.).

He calls this the "silent basic version" and describes its function as

a transitory step between the language free cognitive knowledge base (CB) and the first manifest English utterances (p. 486).

The important role of the mother tongue in foreign-language writing is also pointed to by the results of a study by Wolff (1989), which was not process-oriented but exclusively product-oriented. A detailed comparison of the writing products of learners in the same text production task, first in the foreign language and then (at a different time) in the mother tongue, showed with regard to all linguistic criteria used for comparison (text length, narration time, coherence, lexicon, narrative perspective, narrative structure) that the mother-tongue and the foreign-language narrative product were largely similar. However, part of this similarity

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could also be a result of the fact that the first and second execution of the writing task took place in relatively quick succession.

In his study, for which only an intermediate report is available at present (1988), Königs did not find such a strong influence of the mother tongue. In his data, he observed

passages in which the mother tongue was not used at all or whose use was at least not visible, passages in which the use of the mother tongue was obvious, and finally passages in which both languages were confronted systematically (translated from Königs 1988:109).

In an earlier publication, Börner assumed that the mother tongue had a very strong influence on foreign-language writing:

Written texts by advanced learners prove without a doubt that, even when the learner has complete command of the grammatical structures of the target language, the mother tongue has a strong influence on parts of the lexicon, the collocations and some text-grammatical patterns, so that, in spite of the formal correctness of a text in the target language, mother-tongue patterns of expression show through clearly (translated from Börner 1987:1344).

Of late, Börner has held a much more reserved position (1989:57). He assumes that the method of thinking aloud, when used in the mother tongue, artificially induces a stronger influence of the mother tongue (1989:44). Indeed, this possibility cannot be ruled out. Only further systematic research using differing methods of data collection can bring us new information here.

(6) Writing in L1 vs. writing in L2

What similarities and differences are there between mother-tongue and foreign-language text production processes?

This question is inextricably linked to the previous one, but is not identical to it, because this case does not have to do with influence, but merely with a basic similarity or difference of the processes involved.

Zamel assumes that mother-tongue and foreign-language writing processes are largely similar. She observes

that skilled ESL writers explore and clarify ideas and attend to language-related concerns primarily after their ideas have been delineated (1983:165).

Purely theoretical considerations lead Krashen (1984:41-43) to a similar conclusion. But this consideration at most concerns the basic structure of the writing process. This fact becomes obvious as soon as separate characteristics of the process are recorded quantitatively and compared. A study by Friedlander (1987, studied here via Hayes 1989:215) with four Chinese learners of English showed the average length of the text production units which were uttered without pauses. In the mother tongue, this value was 6.33 words, whereas in the foreign language it was only 2.3 words. Inversely, the learners required an average of only 2.55 of these text production units in order to generate a sentence in their mother tongue, while for the foreign language the value was 7.03 units. Both results show that the text production process in the mother tongue was considerably more fluent than in the foreign language.

I came to similar results in my study of 1989 (see table 6 there, p. 426). A comparison of the text production rates showed that an average of 9.21 words were written per minute in the foreign language, but more than twice this amount in the mother tongue, that is, 21.65 words per minute. That the foreign-language writing task makes completely different demands on the writer than a writing task in his mother tongue is also shown indirectly by the length of the verbalizations: in the foreign-language writing task, these were around ten times as long as in the mother-tongue writing task.

(7) Writing vs. translating

What similarities and differences are there on the process level between free foreign-language text production and various forms of producing texts modelled on an existing text, especially translating?

Konigs investigates this question in a comprehensive study which has unfortunately not yet been published. However, in a preliminary report (1988), he reports that the only subject who had been examined until then

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had considerably more problems with the translation task (approx. 76) than with the writing task (approx. 30), which he explains with reference to the opportunity which writing gives to "avoid these problems by wording things differently or by giving up a certain concept", that is, in practice, by using so-called 'avoidance strategies'. It is also interesting that the subject only used dictionaries three times for the writing task, but 41 times when translating into the foreign language. According to Königs, the use of dictionaries was part of an "unquestioned ritual" when translating, whereas these subjects avoided it as much as possible in free writing (1988:113). In my studies, however, this difference with translations using reference works was very much less obvious: dictionaries were used an average of 0.94 times per L2 problem in translation into the foreign language, and 0.55 times in free writing. The bilingual dictionary was clearly dominant in both types of task (see 3).

Königs could glean no definite information from the subject he examined concerning the more basic question as to the difference between the translating process and the writing process. His

mental procedure while writing in the foreign language and while translating into the foreign language is sometimes identical or at least similar, but relatively dissimilar in other cases (translated from Königs 1988:113).

As described above under (6), my comparison of writing and translation processes rather led me to the conclusion that both are largely similar (for details see Krings 1987). Here, too, only further research can bring clarity.

(8) Writing vs. speech

What similarities and differences are there on the process level between writing a foreign-language text and various forms of oral language production in the foreign language?

Potential answers to this interesting complex are to be expected from the project by Zimmermann. However, at present there is only an intermediate report (Zimmermann 1992). Up to now, Zimmermann has only made a detailed investigation of the differences between mother-

tongue and foreign-language oral renarrations as well as of the influence of an oral first narration on an oral second narration of the same story. The only specific reference to the question of the differences between the oral and the written retelling of Chafe's 'Pear Story' film is the observation that ten of the written renarrations are shorter and five longer than the oral versions; in two cases, they lay between the values for the two oral re-narrations, and two tape recordings were useless for technical reasons. The average values of 440 words (oral) and 434 words (written) suggest that there are no differences to speak of here. In possible further analyses it must be taken into account that all written versions were without exception written after the oral versions, so that a potential sequence effect must be kept in mind at all times as a confounding variable.

(9) L2 vs. L3, L4 etc.

What similarities and differences are there between text production processes in the first foreign language and in all foreign languages learnt subsequently?

To my knowledge, there are no systematic observations on this subject, which must be seen principally against the background of the more recent discussion of so-called 'tertiary language learning' (see also Bausch et al. 1986).

(10) Task

How do different text production tasks influence the foreign-language text production process?

By nature, empirically founded answers to this question can only be given when all other variables in the design of the experiment (including the subjects) are kept constant and only the variable text production task is changed. To my knowledge, this has not been the case up to now. We may confidently assume that the writing task has a strong effect on the writing process and has done so in the research work carried out, but was not monitored in the test arrangements.

(11) Writing situation

How does the actual writing situation influence the foreign-language text production process?

This question is of particular significance, especially when the results of prior research work, which was predominantly 'laboratory research', are to be transferred to real teaching situations, where many situational factors are totally different. In most tests, the subjects had been given no time limit for their writing task. But writing under normal teaching conditions is almost always forced into a fixed time frame (school lessons etc.). And it could well be that pressure for time changes the writing processes radically. The same is true of writing under examination conditions (end-of-term examinations etc.). To my knowledge, the influence of these factors on the writing process, which is immediately relevant in practice, has not yet been investigated, but is to be wished for as a further important object of research.

(12) Writing medium

How does the writing medium (especially the computer) influence the foreign-language writing process?

This question, which is becoming more and more important with regard to the new media, is dealt with in the study by Dam/Legenhausen/Wolff. They observed that the use of a word processing system considerably changes the writing behaviour of the subjects in comparison to traditional writing with pencil and paper. For example, the pupils tended to record rough drafts, knowing well that alterations are easier to make at the computer than on paper. Also, they carried out more extensive revisions at the computer. On the whole, the researchers came to the conclusion

that the screen text combines features of informal as well as formal registers. Its tentativeness and ephemeral quality is reminiscent of spontaneously produced informal spoken language. This increases the students' willingness to take more risks, and their inhibitions against putting something down in writing are reduced (Dam /Legenhausen/Wolff 1990:333).

However, these results have not yet been backed up by statistics.

(13) Process vs. product.

What relationships are there between the text production process and the text produced?

To my knowledge, there are only individual observations on this important question. For some remarks on the relationship between process characteristics and the quality of the written product see (15).

(14) Text production vs. text reception

What relationships are there between foreign-language text production processes and various types of receptive language use processes, especially the reading of foreign-language texts?

To my knowledge, there are as yet no systematic studies of this question. However, let me mention the theory on foreign-language learning by Krashen who, under the heading of 'input hypothesis', postulates an intimate relationship between the receptive and the productive aspects of foreign-language competence (Krashen 1985). In his small monograph of 1984, Krashen extended this theory to the explicit inclusion of foreign-language writing, which in his opinion is promoted most of all by the extensive voluntary reading ("pleasure reading") of foreign-language texts (Krashen 1984:21ff.).

(15) Individual variation

What intra-individual and inter-individual differences can be observed in the foreign-language text production processes of the individual learners, and to which factors can they be ascribed (personality of the writer, degree of competence in the foreign language, familiarity with the text type in question etc.)?

Almost all available studies confirm that there are distinct differences between individuals with regard to most of the process parameters examined. Of special interest for the application of the research results in

teaching practice is the question as to how, from the point of view of the process, good writers differ from bad writers.

Börner, Krings and Zamel unanimously report great differences in prior planning: this reaches from few key words to synopses and drafts which are almost as comprehensive as the later, final text product. The quality of the text product appears to be independent of type and extent of prior planning, i.e. in opposition to a widely held view, even good writers do not in all cases make detailed synopses or drafts.

The strong individual differences have also been proven by numerous quantitative results. In the study by Börner for example, the length of the texts produced by only four subjects varied between 18 and 41 lines, the total duration of the text production process being between 72 and 90 minutes, the average pause length between 18 and 28 seconds and the number of revisions between 9 and 19 (see Börner 1987:50). In my study of 1986, also with only four subjects, the length of the text produced varied between 190 and 295 words, the total duration of the text production process being between 54 and 147 minutes (for the same writing task!), the percentage of the total text production time taken up by pauses between 16 and 52 per cent, the average length of the pauses between 9 and 22 seconds and the text production rate between 1.70 and 3.72 words per second (see Krings 1989:412). That this strong individual variation applies not only to the writing process, but also to the process of verbalization, is shown by the fact that the length of the thinking aloud protocols in this study varied between 2467 and 9978 words, although the final text product of the second subject was only 46 words longer than that of the first.

All of these results prove the strong individual variation in the structure of the writing processes. We should make the critical remark here that none of the studies carried out up to now have used sophisticated statistical methods in order to examine the significance of qualitative results of this kind. This is an important deficit which must be made up for in future studies.

(16) Methods of control

How can foreign-language text production processes be controlled methodically and didactically?

This question is the decisive link between empirical-descriptive research and its application in teaching practice. Surprisingly, there have been no systematic studies of this question up to now. In all probability, the reasons for this are to be found principally in the fact that empirical studies of the influence of certain teaching methods on the cognitive processes of the learners are very difficult to realize methodically. For some approaches to studies of this kind see (18).

(17) Theory of foreign-language text production

How can the results of research of this type be condensed into a theory of the foreign-language text production process and what is its contribution to a comprehensive theory of foreign language learning?

Once empirical research has developed to a certain extent and has yielded a multitude of individual results, there is a risk that we cannot, as it were, see the wood for trees, i.e. that we lose our grasp of the whole because of numerous details. This explains the attraction of synoptical models. In the field of mother-tongue text production, we should name the often quoted model by Flowers & Hayes, which has been discussed in numerous publications. Börner convincingly adapted this model to the special case of foreign-language writing (1989:355). This happened before concrete results of research on foreign-language writing processes were available, but the results achieved in the meantime should still be easy to integrate into the model. In figure 1, I present an alternative model. My model especially attempts to lay special emphasis on the relationship between planning processes which apply to both L1 and L2 text production processes and those which are L2-specific.

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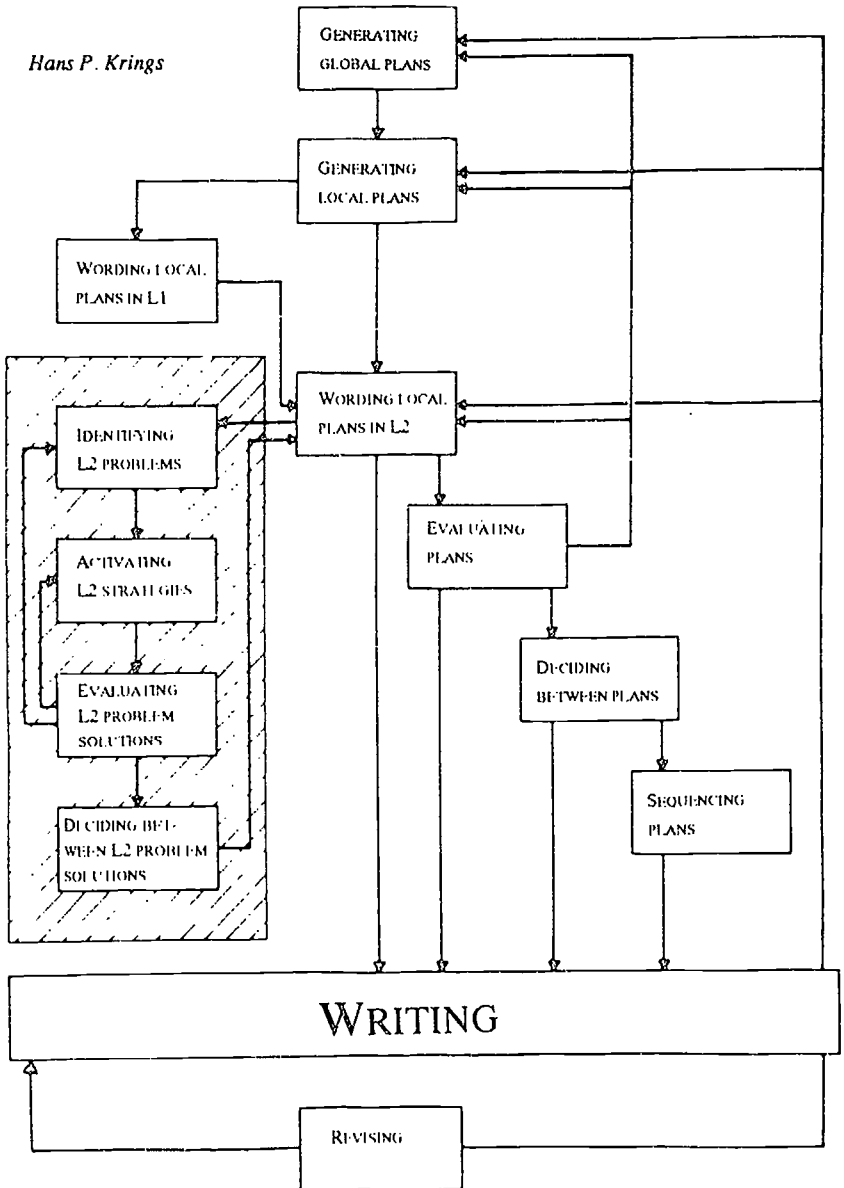


Figure 1 L2 text production

Until now, only the 1984 publication by Krashen, referred to several times above, has attempted to integrate the results of research on foreign-language writing processes into a comprehensive theory of learning and teaching foreign languages. However, it presents a 'bird's eye view' in some respects and must be made more precise in many points.

(18) Consequences for teaching practice

What practical consequences for foreign-language teaching do the research results achieved suggest, especially with regard to the teaching of writing in a foreign language?

As said at the beginning, the state of research is still very unsatisfactory, and the results cannot be generalized at the present moment. However, it is of course legitimate to reflect on possible consequences for teaching practice in case further investigation confirms the results achieved up to now. In the following I shall attempt to summarize some of the consequences for teaching practice which I believe will ensue.

1. It is very probable that the mother tongue plays an important role in directing foreign-language writing processes, even when the details of this role are still controversial at present (see above). This lets the methodical alternative of 'essay' or 'translation' (by which I mean translation into the foreign language only here), an alternative which has frequently been discussed in the context of foreign-language teaching, appear to be at least partially obsolete. It is more probably the case that both forms of language use or of language practice have a very similar potential for foreign-language teaching, a potential which is best exploited by means of the coordinated use of both. The frequent claim that free foreign-language text production must always have priority because it leads the learner to a more 'idiomatic' use of the foreign language is on no account correct. Or, to put it even more clearly: to my mind, the investigation of foreign-language writing processes supplies no arguments against translating into the foreign language. Writing and translating do not seem to be real alternatives.

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2. For writing, too, the principle of product-process ambiguity applies, i.e. it is not possible in any way to make a reliable conclusion as to the processes which have led to the product. It is possible that texts produced by learners of a foreign language are a useful method for identifying errors, but they are definitely not a good method for identifying the causes of errors.

3. In contrast, the numerous L2 problems which occur when writing in a foreign language are an excellent instrument for identifying lack of competence in the foreign language. As most of these are only in the consciousness of the writer during the writing process, their potential for learning can only be put to use when the learners are asked to record the problems as they occur and thus make it possible to reproduce them. Only in this way is it possible to give the learners feedback with regard not only to the finished text, but also to the numerous hypotheses occurring during its production. This feedback would make the process of forming hypotheses, of which we know from a large number of empirical investigations that it plays an important part in foreign language learning, considerably more intensive and effective.

4. In foreign-language writing processes, we can observe a high degree of individual variation as regards practically all subprocesses. Against this background, it seems open to question whether all teaching of foreign-language writing with a generalized learner as point of departure is perhaps condemned to failure from the very beginning. It is more probable that teaching of this sort will from the start take into account the existence of different types of learners and, at a suitably early stage, develop methods for the inner differentiation of the teaching of writing. However, process research does not yet have sufficient knowledge of the different types of writers. For this reason, the only recommendation that can be made for teaching practice at present is that the teachers try, by careful observation or by interviewing the pupils, to form an impression of their differing procedures when writing texts in a foreign language. The teachers should also consider using the methods of thinking aloud or of group protocols themselves whenever the practical conditions allow it.

5. Finally, there are a number of reasons for assuming that, when writing in a foreign language, the wide field of lexico-semantic problems plays a much more important role than that of morphosyntax ('grammar'). This demonstrates the central role of 'foreign language lexical acquisition' (not to be confused with 'learning vocabulary'). The systematic learning of meaning must play a larger role in the teaching of advanced learners. It must not remain a methodical 'waste product' of text analysis. Also, the researchers must check their models of foreign language acquisition in order to find out whether they are giving sufficient attention to lexico-semantic learning or whether their models all attach too much importance to syntax.

4. Summary and future perspectives

Writing in general and writing in a foreign language in particular is a complex psycholinguistic process which has not been sufficiently investigated in the past. Each theory of the teaching of writing is by definition supposed to direct this process and, implicitly or explicitly, make certain assumptions about it. The teaching of writing therefore needs research into writing processes if these assumptions are not to remain pure speculation. The more we as language teachers know about the nature of foreign-language writing processes, the better we can understand and improve these processes.

This contribution presented nine empirical studies which deal with foreign-language writing processes from different points of view. Their existence demonstrates that research is now under way. The first results are available for a number of questions. Numerous questions have not been investigated at all. In this regard research into writing processes is still a long way from giving the teaching of foreign-language writing a solid empirical basis. However, the first steps have been taken. A look at the related research into mother-tongue writing processes, a field which has undergone quite a dynamic development in the last ten years, gives additional inspiration (for an overview of research, see Krings 1992). This field can in many ways function as a point of reference for research

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into foreign-language writing processes. I would suggest that research into foreign-language writing should make better use of the advantage of its mother-tongue counterpart.

We can only hope that future researchers will feel motivated to carry out empirical studies of their own in this field. It would be preferable if as many researchers as possible were teachers themselves. This is because, as teachers, they have easy access to data, and secondly, because they have the opportunity to immediately apply the results of their studies in practice. However, some basic standards with regard to planning, execution and evaluation of empirical studies must be taken into account. (Of the numerous introductions to the field, that by Huber 1987 is to be especially recommended.) I hope that my contribution has given a few ideas in this respect.

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Text-ing. Toward a didactics of (second- language) writing

Karl-Heinz Pogner

Summary

The first part of this essay attempts to describe paradigms central to the current discussion of writing didactics (in L1 and L2). The approaches result in differing text genres and didactic courses to take. This is illustrated by numerous practical writing tasks. The second part of the paper presents propositions for a communicative/creative process and production didactics, the central focus being above all writing problems and to a lesser degree foreign-language problems. This didactics is in deliberate contrast to the endeavour to make all writing processes conform to the same linear stage model, a practice which can frequently be observed in process teaching. Instead of reducing the complexity of the writing process (for didactic reasons), this didactics will run extensive writing processes 'in slow motion' and reflect upon them.

0. Introduction

Recent methods in writing instruction, especially the process approach, focus frequently on the teaching of expressive writing. This focus may be useful if our goals in teaching consist of students' self-realization and personality development, and when we try to avoid, or want to overcome a writer's block. But such an approach can also limit the potential of process teaching. In this paper I, therefore, want to develop a more integrated view on writing instruction by combining the process approach with other paradigms in writing didactics.

In order to develop such an integrative concept, I will present a very short historical review (Section 1) and some of the predominant paradigms (Section 2). Finally, I will examine these paradigms with regard to their contribution to a didactics connecting communicative and creative approaches with the cognitive processes underlying writing processes (Section 3).

1. In the jungle of writing didactics

After the 'pragmatic change' in the field of second language acquisition and teaching, the oral dimension of foreign-language learning was dominant for many years (and with good cause). Today, however, the didactic subject of 'writing in a foreign language' is back in fashion. But a rollback to the bad old days of the writing-dominated translation & grammar method is neither sensible nor possible. The altered demands now made on modern foreign-language teaching make it just as impossible to simply hark back to the method of controlled/guided composition with its predominant focus on accuracy and correctness or to prescriptive teaching of the often caricatured 'five-paragraph essay writing' kind.

The paradigms have changed. Slogans such as "we write in order to achieve something" or "everyone can write", "writing is a form of self-discovery", "writing is a game", "writing is a form of thought" and "concentrate more on the process than on the product" mark the most significant attitudes to be found in the current, sometimes confusing didactic discussion.

The division of process didactics into 'expressivism' and 'cognitivism' is widespread in the discussion of didactics. However, more recent, historically constructed reviews usually overcome this either/or division into the expressivist movement on the one hand, characterized by the catchword 'self-discovery' and with Peter Elbow (1973) as central protagonist, and the cognitivist group on the other hand, with its 'problem-solving' label and its figurehead Linda Flower (1981).

Thus, for example, Raimes (1991) quotes the following main topics for American second-language writing pedagogy: linguistic and rhetorical form (from 1966 on), writer and writer's processes (from 1976 on), (academic) content (from 1986 on) and reader's expectations (academic discourse community; also from 1986 on). In her opinion, the present is characterized by competition and debate between these approaches, and new traditions are now discernible within the pluralist situation. The latter include findings such as the complexity of the writing process and

the considerable differences among the students and the learning processes involved.

Tony Silva (1990) describes the history of ESL writing instruction in a similar fashion: first the focus on lexical/syntactical features (controlled composition) changed in order to concentrate instead on the discourse level (current-traditional rhetoric and contrastive rhetoric), then the emphasis shifted to the writer's composing behaviour (process approach) and, finally, to the discourse genres in the academic discourse community as reader (English for Academic Purposes).

We should be careful not to confuse the scientific discussion of didactics with actual teaching practice (cf. Zamel 1987); however, at least as far as the teaching of writing is concerned, we should not repudiate completely Silva's criticism that an unproductive approach cycle appears to be at work here:

[...] (1) an approach is conceptualized and formulated in a rather limited fashion; (2) it is enthusiastically (some would say evangelically) promoted; (3) it is accepted uncritically; (4) it is rejected prematurely; and (5) a shiny new (but not always improved) approach takes its place. (Silva 1990:18)

As a way out of this unproductive circle, Silva recommends the scientific scrutiny of the effects of the separate approaches in teaching (the *Journal for Second Language Writing*, edited by Tony Silva and Ilona Leki, deals with this). Silva also proposes an integrative view of L2 writing as a "[...] purposeful and contextualized communicative interaction, which involves both the construction and transmission of knowledge" (Silva 1990:18).

With this specific goal of an integrative concept in mind, in the next section I would like to cut a few guiding paths through the jungle of the various didactic approaches involved.

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2. Paths

This section will first present two didactic positions based on different text functions. On the one hand we have the writing of expressive/creative texts (Subsection 2.1). On the other we have the writing of functional texts (Subsection 2.2).

We shall then shift the emphasis to the methods used in the teaching of writing by discussing the consequences of research and didactics in the field of writing processes (Subsection 2.3) and giving a short account of more skill-oriented approaches (Subsection 2.4).

The examples I use to illustrate my approach are taken from German courses held at a Danish university. However, the basic ideas discussed here are also intended as suggestions to other kinds of schools and other target groups.

2.1. Path 1: Expressive/creative writing

For many years, under the catchword 'writing crisis', one of the criticisms voiced in the pedagogical discussion has been the fact that the unrestricted dominance of audio and visual media may well lead to a decay of written culture. In spite of this pessimism and a discernible crisis of writing as well as the discovery of a 'functional illiteracy', writing workshops held at youth centres and in adult education enjoy considerable popularity. These workshops are concerned with associative, expressive or literary writing (cf. Rico 1983) and propagate personal writing according to the slogan "everyone can write" (Boehnke/Humburg 1980) as an expression of self-emancipation, self-realization and personality development or as a form of autotherapy.

In view of the popularity of these writing groups, it is not surprising that their approach has also found acceptance in schools as a way to overcome the widespread aversion to writing. Under the collective term 'creative writing', expressive and literary writing has been included in language teaching (cf. Elbow 1973 and Spinner 1993) and in 'productive or action-oriented literature teaching' (cf. Haas/Menzel/Spinner 1994). It

has also entered into the foreign-language training of schools and universities (cf. Mummert 1989a, Mummert 1989b and others). There are 'writing games' in order to prepare this creative writing in writing workshops and to enable the collective writing tradition to become a 'writing culture for all', thus aiming at the equality of product, process and person. The intention here is that the playful use of language and active dealings with literary texts and forms encourage the enjoyment of writing. Not only grammar cracks and literary demiurges have the right to write about what interests and moves them.

The concept of creative writing stems from the Anglo-American language area and is assisted in France and Germany by reformatory pedagogical approaches which include Freinet's concept of the 'free text' (cf. Freinet 1989/1967) into foreign-language teaching, too. Creative and free writing is in explicit contrast to purposeful, rational writing, in which writers function primarily as players of roles and not as personalities. Instead writing becomes an experiment in thought and feeling and finds its pedagogical justification primarily in the statement "affective is effective" (Hermanns 1989:28). In extreme cases, the free writing approach can result in the principle of "write whenever you want about whatever you want" (Hövel [no year given]: Preface). The outcomes of free writing - within the framework of institutionalized teaching, too - are demonstrated by reports about German lessons held in France (cf. Baillet 1989a, Schlemminger 1988 and 1991).

Examples:

Headings (small groups / plenum)

In small groups, the students assemble a text from clippings of newspaper headlines. They are free to invent their own headlines.

1-2-3-4-1

(individual work / plenum)

The students write a poem. They are instructed to start with only one word in the first line. They must then write two words in the second

line, three in the third etc. They are to continue in this way until they are tired of it. The first word is repeated in the last line.

Continuing a story (small groups / plenum)

The beginning of a story (e.g. a detective story) is given, either written by another pupil or the teacher or taken from a book. The students are asked to continue the story in small groups. This technique can be extended to form a kind of 'circular writing' whereby, in a smaller group, the stories are continued by the neighbouring students.

2.2. Path 2: Communicative-functional writing

Teaching of the native language has had a predominantly pragmatic orientation for several years, and the formation of a comprehensive communicative competence is now more or less regarded as the aim of foreign language teaching - at least in didactic theory. However, the written dimension often lags behind the oral here. Theory and practice are far from having gone through the pragmatic change everywhere, which sees writing principally as a means of communication and thus of human activity.

The text is now (since the pragmatic change [my addition]) no longer defined as a grammatically connected string of sentences, but as a complex linguistic action with which the speaker or writer, "emitter" for short, attempts to construct a certain communicative relationship to the listener or reader, i.e. the recipient. (Translated from Brinker 1988:6)

Writers pursue certain intentions in written communication: they write in order to achieve something. The communicative approach lays a strong emphasis on the functions of the written texts and the importance of adapting to the readers. (For the concept of communicative writing cf. Bereiter 1980:84; for the reciprocal relationship of writer and reader see Nystrand 1989:81).

The informative intention of the writer is central here, so is the adequacy of the 'communicative offer', the text makes to a reader. However, this does not mean that an expressive-creative text has expressive and poetic functions **only** or is exclusively centred on the writer. Similarly, a communicative-functional text does not have an informative and a direct or indirect appeal function **only**, and it is usually not exclusively oriented toward the recipient. Thus, in the way in which they often are used, the concepts of creative and communicative writing are not very well chosen and are perhaps even misleading. Communicative writing can/must often produce unexpected linguistic solutions, i.e. it must be creative in order to achieve its aim. Inversely, there are (in foreign language teaching at least) very few forms of writing which do not, at least potentially, have communicative functions, even if this only means that the text produced gives rise to further oral or written communication.

There are no conscious writers without serious readers, and there are no reader-friendly texts without interested readers. For this reason, foreign language teaching should be so oriented that it enables students to participate in international written communication, whether in individual penfriend situations or in correspondence with twin classes (cf. Rath 1989 and Melief 1989).

Writing should enable people to take up relationships with people in other countries and get to know them better. But in the classroom, too, writing can be used in such a way that the students interact by means of texts. It also appears to be good sense to integrate written communication into more comprehensive role play or simulation games.

Indirectly, the communicative viewpoint is also encouraged by the increasing use of new media and of new forms of communication (computer, telefax and electronic mail) as well as of the demands which these media make on the writers. Here new routines of written communication have developed. These forms and functions are often radically different from written communication in the way in which it took place before the introduction of these media. Research into the latter

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has only just begun and the first didactic applications are now being tried out (Beier 1991 and Donath 1991).

Examples:

German Cities (Work in small groups / plenum)

The students design letters to the tourist boards of German cities in order to acquire information on these cities. After discussing the formal requirements and the first drafts, the letters are corrected and sent off. Using the material they receive, the students present the cities in question in a short talk and on a wall newspaper.

'Letter to the Editor' (Individual work / small groups / plenum)

After discussing a newspaper commentary on the subject of 'traffic problems', the students write 'letters to the editor' in which they voice their opinion on this commentary. These letters are discussed in small groups and are used, in conjunction with other materials and activities, to prepare a role game on the subject of 'Get the cars out of the inner cities!'.

Contact Ads (individual work / quiz groups)

After reading authentic contact ads and discussing whether those in search of a partner are men or women, the assignment is "You are lonely and wish to find a partner for life. Living together and/or marriage possible later. Describe your own qualities and your ideal partner." When the contact ads have been written, the group is divided into two. The ads are exchanged within the separate groups so that no one has his own ad anymore. The first ad is read out, and the opposing group must guess who wrote it. The other group can then read out an ad of its own etc.

2.3. Path 3: Concentration on the writing process

Writing is not only part of a communication process; it is a complex cognitive process in itself in which existing or acquired knowledge must be put into words. On the one hand, knowledge stored in a non-linear

fashion must be arranged logically or in a hierarchy, and on the other, it must be put into linear strings of sentences which in turn form a complex text structure. This tension between linearity and non-linearity is one of the principal reasons why writing is so difficult, even in the native language. But writing can go beyond these functions of knowledge-telling, in which case it contributes to intellectual development: "Writing, then, is far more than merely the act of transferring thought to paper; the act of writing helps to shape and refine our thinking" (Johnson & Roen 1989: XII).

In research and didactics, writing is seen principally as a problem-solving process which itself can be divided into sub-processes whose sequence is not specified from the start (cf. the textbook by Flower (1981) and the teacher's handbooks by Hedge (1988) or White & Arndt (1991)). Most process models stress that writing is not a linear but a recursive process. Sub-processes which have already taken place (such as planning, 'translating' and reviewing) are, as writing progresses, run through repeatedly under more 'strict' conditions (for L2 research see the synopses by Krapels 1990 and Krings in this volume). This is why writing requires of the writers that they can manipulate these processes flexibly and sometimes in parallel. In order to prevent failure due to the variety of demands put on the writer by the various sub-processes and writing phases and to avoid suffering from writer's block, writers use planning as an aid in all stages of the writing process.

This planning can concern the purpose of the text, the writer's and reader's roles, the collection and selection of content as well as composing plans (cf. Flower & Hayes 1980:44-50). Other helps include following implicit or explicit writing maxims (cf. Börner 1992) or the routinization or mastering of analysis, production and rewriting techniques (cf. Sub-section 2.4).

Thus, the process paradigm above all asks what the writers are doing before, during and after writing a text. It examines the production of (mostly expository, informative) texts principally as the generation of meaning or as a negotiating of meaning by means of written

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communication. The teaching of writing can therefore be characterized as follows:

[...] the teaching of writing is moving from an emphasis on the product to an emphasis on process. The old practice of assigning a paper and returning it (covered with red marks) a week later is gradually being replaced by the process model. Under this model, teachers intervene in all stages of the writing process from the generation of ideas, through the actual composing process, to revision, and final editing. (Thomas 1987:1)

Writers must jump to and fro in their text. The text already produced at any one point of the writing process has an effect on subsequent production and must often be re-read so that one can continue writing. It is possible that it must then be altered. Plans devised at the start and the intentions one had must be constantly scrutinized and possibly revised. Preliminary reflections on addressee, text genres etc. must be constantly actualized along with the choice of the knowledge relevant at a given time.

Just as important as writing itself is rewriting in order to fulfil one's purpose and meet the demands of a given rhetorical situation. These rewriting processes can be facilitated considerably by means of electronic word processing programs. In order to demonstrate to students the importance of the final stages of text production (revising and editing), the texts produced should be 'published'. This publishing can be realized by reading aloud in groups or in the class, by preparing wall newspapers or by entering them into a 'class diary' which could possibly be exchanged with other classes. Another possibility is to produce a class magazine or anthology. The texts could also be sent to actual addresses in the country in which the target language is spoken, in order to demonstrate that they do not only write texts for more or less interested teachers or for the waste paper basket.

Examples:

Our class (small groups / work in pairs / plenum)

In small groups, the students devise questionnaires with which they attempt to learn more about their fellow students. In the plenum, they agree on one questionnaire. The students are divided into groups of two. Using the questionnaire, the students in each pair interview each other. In the plenum, each student briefly introduces his or her neighbour. Then they write a short character study of their neighbour and discuss with the student in question whether the description fits. Maybe, the texts must be revised. With linguistic help from the teacher, the students then prepare the final texts. The separate texts are collected and published in a 'Who's Who?' for that particular class. (If pseudonyms are used, other teachers or parallel classes can guess who is meant by a certain description).

Our magazine (project: individual work / group work / plenum)

Together, the students produce a magazine for a certain target group (fellow students, parents, German twin class etc.). From a learning card file, the students select, individually or in small groups, topics and writing tasks. The texts are discussed, improved, corrected (and possibly entered into a word processing program). Drawings, photos, other illustrations and layout are just as important as the texts

Our school (project: small groups / plenum)

In order to find a German twin class or twin school, the class wishes to send a brochure to German schools. The class works on different topics for this brochure in small groups (information on Denmark, the landscape, the village, town or city, the school, the Danish school system, the class, the subjects, the students, their hobbies etc.). The separate blocks of text are put together to form the larger text and then revised and corrected. A provisional final text is sent to a German class as test material. The German students are asked for their opinion on the brochure by means of a questionnaire. The text is revised on the basis of this feedback. This activity with the questionnaire could be the start of correspondence between the classes which could be continued using letters, audio letters or video letters.

2.4. Path 4: Writing techniques/sub-skills

In order to help students with the management of their own individual writing process, it makes good sense to put at their disposal specific writing techniques, they can use in the sub-processes. Thus, individual strategies for generating content, the promotion of planning behaviour, the analysis of the audience, promotion of the formulation behaviour and of the revision behaviour are practiced (cf. Wolff 1991 and White & Arndt 1991).

These techniques are not only important for written language skills, but for communication in general. Communicative approaches and process approaches are connected: writing tasks are segmented and then reintegrated into a comprehensive writing process. With this method, the students get to know alternative formulations in order to choose that which is appropriate to the linguistic and situational contexts involved. This is the way in which devices for increasing readability such as simplicity, lucidity, brevity and stimulation (Schulz von Thun u.a. 1987) and the wording of certain speech intentions (wishes, hypotheses, recounting what has happened before etc.; cf. Krüsmann 1989) are practiced. Alternatively, authentic texts are analyzed by asking for which situation they were written in order to then rewrite them to correspond to a different situation (different goal, purpose, medium, readers etc.) (cf. Arndt & Ryan 1992). The aim of this training is to establish formulation as a result and an expression of a conscious communicative choice. In this sense, this approach contributes to language awareness and can at the same time illustrate linguistic variety as well as rhetorical or stylistic choice - in the target language and in the native language (cf. Leki 1991). This awareness can concern the critical analysis of text types (cf. Björk's paper in this volume), but also, in the context of language criticism, promote the understanding of "how language use can either reproduce or challenge existing power relations" (Ivanič 1990:131).

Examples

How does one express fantasies, fabrications, hypotheses and wishes? (individual work or small groups / plenum)

Photographs or pictures and beginnings of sentences are given, e.g. "I wish I were...", "On my dream holiday, I would..." or "If I were invisible,..." , "You're a turkey on Christmas Eve. How do you feel?"

Rewriting (group work / individual work)

Together, the students think up a source text. Then, different groups draw lots as to which changes are to be made to the text. For example: the text is to be rewritten in the style of a science fiction story, an article for a gossip column, a diary entry, a curriculum vitae, an election campaign speech, a letter to the authorities etc.

Advertising (e.g. a travel advertisement) (individual work or group work / plenum)

An authentic travel advertisement (with a relatively large amount of text) is turned into a 'normal' text ('normal' syntax, 'normal' layout, omission of the picture, rewriting in complete sentences with finite verbs, insertion of conjunctions/prepositions).

Then the students write a text about the product (i.e. the destination) from the point of view of the consumers' advice bureau or of environmentalists: a complaint concerning the inferior quality of the service rendered or a discussion of the ecological problems of tourism. How are these critical opinions realized by means of language?

An employee of the travel agent organizing the trip devises a short lecture on the destinations involved for an advertising show for travel agencies. How are the positive aspects realized by means of language?

Inversely, the description of a certain place in a novel can be turned into an ad, or a text on one's own home town can be rewritten for different target groups (differing ages and incomes), for differing periodicals (magazine for young people, women's magazine, travel magazine etc.) with fixed specifications concerning the length (shortening, lengthening, elaborating etc.).

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Manuals (individual or group work / plenum)

An exercise for advanced writers: authentic directions for use (e.g. for a PC or a CD player) are made intelligible for all, or the manuals are compared with the advertisement for the product.

3. Out of the jungle and into text production!

Now that I have presented the various ways of seeing the writing process, the remainder of the paper will consist of reflections as to how the described paradigms can be made useful for an integrative didactics of (foreign-language) writing.

In this section I shall first sketch some propositions for a didactics of (foreign-language) writing and then present some aspects of an integrative production didactics ('text-ing').

3.1. Text production in L2

The approaches presented in the previous section should not remain in isolation from one another in the teaching of writing, but should be interconnected sensibly in teaching sequences. Also, text production should be seen as part of more comprehensive text work in foreign language teaching. I would therefore like to make the following propositions:

- 1 A lot of writing should be done in foreign language teaching. Writing must (also) take place in the classroom, and group writing and discussion of the texts produced by the students according to the workshop approach should take place frequently. Right from the beginning, the students should gain writing experience in the target language, that is, produce texts and text fragments in it. Creative writing, which often makes do with playing with very few words and partly goes beyond the rules of syntax and other grammatical norms, strengthens writing pleasure and counteracts possible writer's block.

2. One should not overtax the students with overly complex writing processes. It is necessary to help students to manage these processes, which can be very multifaceted, especially in communicative-functional writing. For this reason, they should practice different writing techniques in isolation. For this purpose, the writing process must be divided into sub-processes.
3. It is just as important to then reintegrate the techniques practiced in isolation into comprehensive writing processes and meaningful communication situations without waiting too long. Also, the products of writing processes should frequently be 'published'.
4. Writing exercises should routinize as far as possible the linguistic tools and techniques necessary for the "writing act" (Ulshöfer 1974) in question, thus unburdening the current writing process. These tools and techniques of communicative-functional writing must be more comprehensive and more differentiated than those used in associative writing.
5. The main focus in teaching must be on the intention to communicate something or negotiate with others, for example to inform someone about something, make propositions, express a mood, tell a story, crack a joke or make plans or suggestions. In order to make this possible, those linguistic structures and materials are supplied and practiced which are required for the 'writing act' in question. In this way, grammar is not practiced as an end in itself but only in relation to what one wishes to communicate.
6. In this writing training, elements of play can create situations which can transform even the practice and automatization of writing skills into significant and consequential communication in the classroom.

- 7 Methods for finding material (e.g. brainstorming, clustering, mindmapping etc.), revision and rewriting techniques (e.g. shortening, expanding, elaborating, inserting examples, heightening readability etc.) must be taken into account in teaching more than before.
- 8 Texts are provisional products of a complicated process with which one can, and must, continue to work. At least the advanced students should be able to know and to observe their own writing processes in order to acquire a kind of process awareness and process competence. The creation of a critical competence allowing the student to judge texts written by others as well as those written by him- or herself must be encouraged more.
- 9 Text work in the classroom connects text analysis with text production. The analysis of a text, aided by the question as to which purpose the text has and for which readers and situations it was written, is a first step toward thinking in linguistic alternatives. It is a fact of life that there is no simple 'right' or 'wrong', but great linguistic variation. The art of writing good texts is essentially to select the linguistic means appropriate to the situation in question and to find a balance between that which must be considered as known and that which is to be communicated. Under this aspect, it is worthwhile to later adapt the texts analysed to altered conditions (situation, reader, text genre).
- 10 Teaching sequences can be roughly divided into phases of language **acquisition** and those of language **application**. The two acquisitive phases (language reception and processing) should **always** be followed by application phases of **free production**. Written text production has important didactic functions here. First, (communicative) writing particularly requires a more intense effort to find a precise, generally valid form of description (which is also

intelligible to unknown readers) than speech does. In writing the writer is **forced to reflect** on language. Secondly, this reflection is **easier to carry out** in writing than in speech, because the writer has more time available, and writing is recorded on paper and therefore accessible for revision.

3.2. Text-ing

In my opinion, the association of process teaching with expressive-creative writing (at least in Europe) limits the potential of process teaching unnecessarily (for a discussion of this misconception cf. Susser 1994:36-39). Especially communicative-functional writing can, in conjunction with process teaching, force the student, in a didactically effective way, to constantly improve his or her text. This is because its being specific to a certain addressee is a criterion enabling us to judge whether the wording and the organization of the text corresponds to the communicative intention of the writer and/or whether it can be understood as a communicative offer in the situation in question.

The learning of text conventions (genres), which often vary from culture to culture, is also of importance here. On the one hand, writing is (almost always) creative linguistically, because it forces the writer to do more than merely reproduce linguistic elements prefabricated or learnt by rote. On the other, text production is determined, and facilitated, by the observance and mastery of certain textual schemata and textual conventions.

In order to achieve these aims in the classroom, writers should produce texts which are also used in the world outside, in order to avoid the risk of writing texts which only exist in school and are modelled on a special 'academic German' or a specific academic style. For this reason, the point of departure for functionally oriented writing workshops is an attempt to find real recipients for the texts produced, so that the learners do not have the feeling that they are only producing their texts for more or less

interested teachers. The focus should be on functional texts. These text genres in particular demonstrate the orientation toward the addressee as well as the fact that the writer is constantly switching back and forward between the role of writer and that of reader. Also, reviewing, revising and editing (including corrections of the grammar) make sense to the writer due to the plan to publish the text concerned.

In functionally oriented writing workshops, the writers go through a complete complex writing process: it is necessary for them to explore the situation of real recipients (for instance German students) before they cooperate and collaborate with other writers and write parts to be later included in a more comprehensive text (for instance a brochure containing information on Danish universities). In editorial meetings, the students combine these textual building blocks to form a complete text. A first draft is sent to the target group in order to acquire feedback (for instance by means of a questionnaire) before a final text is created by means of several revision and rewriting processes (cf. the description of such a writing workshop in Pogner 1992a).

This approach is characterized by cooperation and collaboration, qualities which are important in real-life writing at many workplaces. Non-verbal means such as layout, photographs, drawings and tables are included. Also, project-oriented writing workshops demonstrate the interaction of speaking and writing; in addition to the actual target text, the following text genres and discourse types may occur: target group analysis, target group description, protocols, questionnaire development, interviews, summaries of interviews and evaluation of articles.

In this way, not only is the teacher's red pencil replaced by feedback from the actual recipients; in addition, the writers have the chance to observe a collective writing process which in this case can be said to run in slow motion. This is because comprehensive evaluation phases are repeatedly inserted between the separate stages of the writing process. In these phases, the parts of the text which have already been written or edited are, in groups or in the plenum, examined as to their linguistic and communicative adequacy. Also, in such reflection phases or didactic

loops, the writers can step right out of the writing process and, on a kind of meta-level, reflect on writing habits and writing processes in general: conscious writers are also better writers - at least sometimes.

4. Summary and conclusions

The interrelationship of the paradigms presented in this paper can be summarized as shown in figure 1.

The paradigms described above must not necessarily be considered as insurmountable obstacles; they can be combined within the framework of "purposeful and contextualized communicative interaction" (Silva 1992: 18). The teaching principle presented here, in which a group of writers cooperates on a large writing project, permits a kind of 'processualization' in which the text is rendered dynamic. The exemplary study of the writing processes, which is carried out by the students, is intended to make the writers more sensitive to their own individual writing processes.

Text function: expressive-creative	Text function: communicative-functional	Method: segmentation of skills Method: integration of skills
Writing process: problem solving		

Figure 1 Paradigms in writing didactics

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All levels of learning are included in this creative-communicative process and production didactics: **experience** in the sense of gathering writing experience, **learning** in the sense of directed practice and creation of routines, but also the **gaining of insight** into the writing process by reflecting upon writing processes.

The workshop method of text-ing which I have described is centred on the learner and pursues the two most important goals of all teaching to write: to practice and learn how to find or compose content, and to practice and learn how to express this content in a way appropriate to the recipient and the situation.

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Teaching expository writing

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Summary

The presentation argues in favour of a broader view of the role of writing in L1 and L2 language teaching, a view that extends the use of writing as primarily a testing tool into a learning and thinking tool. Practically, this attitude can be implemented in the teaching of expository texts within the process model framework to promote language proficiency, writing and critical thinking skills. In support of this argument results of a pilot study are presented as are the main elements of a writing course in the Department of English, University of Göteborg.

The skills of reading and writing have no inherent disposition to produce independent thinking. This talent grows not from technologies of language but from attitudes to language itself (R. Pattison, *On Literacy*, 1982:64).

0. Writing as a learning and thinking tool

What Pattison wrote back in 1982 on the relationship between attitudes to language and independent thinking, or what we often call 'critical thinking skills', is equally important to the more specific area of **writing** and the promotion of critical thinking skills. That is, our views on the role or roles of writing in an educational context determine to a significant extent the effectiveness of our efforts to help our students to exercise and improve their critical thinking skills.

Traditionally writing is looked upon, and used, primarily as a testing tool in modern language teaching. We test the students' mastery of, or rather failure to master, language as a code; we correct their grammar, spelling and punctuation errors. It is often a punitive business. Much more seldom do we give them a chance to use writing to verbalise, discover and explore ideas and emotions; to understand and to learn new things. More seldom still do we seize the opportunity of helping them practise critical thinking in their writing. My argument here today is that it is high time to extend our attitude to writing in foreign language teaching, to go beyond

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language proficiency matters and to use writing as a learning and thinking tool, in both L1 and L2.

But why emphasise critical thinking skills so much? The answer is simple - I believe that the perhaps foremost reason for teaching writing, on all levels of our educational systems, is to promote independent thinking. After all, most students will not write much after leaving secondary school, but they will all be well served by having had a chance of developing their thinking habits. And for those who do go on to use writing in higher education and/or in their professional life will also benefit most from a writing instruction that goes beyond formal language aspects.

It is in the perspective of using writing primarily as a critical thinking tool that I wish to share with you my ideas of the goals and methods, or the WHYs and HOWs, of teaching expository texts.

1. WHY

The teaching (reading and writing) of expository texts offers opportunities for promoting

- * language proficiency in real communicative contexts
- * writing skills
- * critical thinking skills.

2. HOW

A. Analysing 'pure' model texts of the following text types

- * Causal Analysis
- * Proposal Making
- * Position Taking
- (* Summary)

B. Writing such text types within the general framework of the process model

1. WHY

1.1. Language proficiency

Since many teachers in both secondary school and university language departments understandably put the teaching and learning of general language proficiency - vocabulary and grammar, for instance - high on their agendas, the first item under WHY, i.e. my first reason for teaching expository texts, concerns language proficiency. As I have already stated, this does not mean that I consider code learning the primary aim of

writing instruction; in fact, I believe language proficiency to be only a fringe benefit, albeit an important and highly welcome side effect, of foreign language writing instruction.

But since I suspect that many teachers are less than convinced of the beneficial side effects of process oriented writing instruction, I should like to address this issue first and to do so in connection with the results of a pilot study that a colleague and I carried out in Stockholm a few years ago. It is a pilot study only, I hasten to emphasise, and there are some deficiencies in the set up, but I still believe it indicates certain tendencies that are worth considering.

The aim of our modest study was to compare the results of traditional language proficiency teaching with those of process writing within the limited framework of one term course only. Our investigation involved some 75 students, divided into three groups, two experimental and one control group. The mode of examination was a short essay of about 450 words. One pretest and one posttest were conducted. Two factors were assessed, 'Language' and 'Form and Content'.

All students followed the ordinary departmental curriculum during the term: they had, for instance, classes in literature and phonetics, as well as lectures on grammar, British and American culture etc. In other words, one course only was singled out for the experiment, a so-called 'Text and Production Course' (the TP course), a general proficiency course consisting of 24 group teaching hours.

Within the framework of this one course, group 1, the control group, had traditional language proficiency training, i.e. translation exercises; grammar; traditional writing. Group 2 had grammar and process writing (four brief essays during the term). Group 3 had no formal grammar teaching but process writing and, in addition, they had a project to be presented in a written essay of some 12-15 pages. The project work was also process oriented, involving discussions of work-in-progress reports during the term.

The pretest and posttests were graded, anonymously, on a scale from 1 to 5 (five being the highest grade). The results of the pretest and posttest are as follows, with the average gains per group indicated in the right hand columns.

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LANGUAGE			FORM AND CONTENT		
group 1			group 1		
pretest	posttest	change	pretest	posttest	change
3.18	-> 3.37	+0.19	3.37	-> 3.87	+0.50
group 2			group 2		
pretest	posttest	change	pretest	posttest	change
2.36	-> 2.64	+0.28	2.36	-> 3.57	+1.21
group 3			group 3		
pretest	posttest	change	pretest	posttest	change
3.00	-> 3.78	+0.78	2.94	-> 4.21	+1.27

What surprised us was not the higher figures for Form and Content for groups 2 and 3 but the mean effect in **Language** for group 3: the result was almost four times higher than that of group 1. It is to be noted that these two groups had almost the same initial scores.

It would be unwise to draw any far-reaching conclusions on the basis of a modest pilot study of this kind. Nevertheless, a minimum claim is that **process writing is likelier to promote than to harm general language proficiency in a foreign language.** Thus there is no reason to fear that time set aside for writing instruction according to this model is an unwise investment. For, in addition to the likely proficiency gains, there are of course the other - and primary - benefits: improved writing skills and critical thinking practice, relevant to both L1 and L2.

Before turning to these benefits, however, it might be important to emphasise, too, that all students involved in the study had grammar teaching in the form of lectures. It was only in the TP course that process writing was substituted for formal grammar teaching. Thus I do not in any way imply that grammar teaching is unnecessary. On the contrary, in my view formal grammar and process writing complement each other in language proficiency teaching.

1.2. Writing skills and critical thinking skills

The obvious immediate aim of writing instruction is to help students improve their writing skills. For reasons of time and space I will not dwell on the assessment of writing skills in connection with process writing except to make two points. First, in our pilot study the two experimental groups scored significantly higher than the control group in the Form and Content category, which was less surprising, but, as I mentioned before, they also performed much better in the Language category. In a holistic perspective, then, the experimental groups had improved their writing skills considerably more than the control group.

My second point, and this is more important in view of the limitations of our pilot study, is that the effects of structured writing instruction within the process model framework on writing skills are already fully and satisfactorily documented in Hillocks 1986.

I therefore wish to proceed to the less well researched area of writing instruction and critical thinking skills. Now, to prove results of the teaching of critical thinking skills is more difficult than to show statistics for general language proficiency or writing skills gains. I have no research results to present or refer to, with the exception of the higher gains shown for Form and Content for groups 2 and 3 in our pilot study. But this is slim and uncertain evidence.

So, in the absence of reliable data, I will try to persuade you to entertain the notion that the kind of training that is involved in our structured writing instruction cannot but help provide critical thinking practice. The burden of proof then will lie with the HOW

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section of my presentation to which I now turn to share with you some of the details of our writing programme.

2. HOW

2.1. Analyzing (i.e. Proposal Making)

I simply want to share with you what we do for our first term students at the University of Göteborg, and what many teachers do variations of in secondary schools. Our programme is very modest and we would certainly like to do much more, but it is what we have been able to work out within limits imposed by time and resources, material as well as personal.

First of all we take the process oriented model of teaching writing for granted: i.e. we work within the process model framework. We follow a fairly standard version:

1. Prewriting (inventio, memory search)
2. First draft
3. Peer Response
4. Revising
5. Teacher response
6. Revising and editing
7. Teacher evaluation
8. 'Publishing'

What is distinct about our programme is that we focus on three very basic text types within expository prose (or 'transactional prose', as it is sometimes called in Britain): **Causal Analysis**, **Proposal Making** and **Position Taking**. We also work with Summary Writing as a discrete text type. As you can tell, the text types we have singled out correspond very closely to basic language functions. We offer the students 'pure', concrete examples of these text types for study and analysis - to help them improve their **text type awareness**.

Let me concretise. I have brought one concrete example of the Proposal Making text type. Let us look at this text together and see how

the author - an American college student - has solved his writing task which was to identify a problem and to come up with a proposal to solve that problem.

The example is taken from Rise B. Axelrod and Charles Cooper, *The St. Martin's Guide to Writing* (1985:181-82):

The deer problem of Moraga by Jim Chow

It was a cold winter night when a friend and I were driving home from a midnight movie. The headlights arced out a narrow path in front of the car. All of a sudden, a deer bolted onto the road. Swerving to avoid hitting the animal, we scraped a car parked on the side of the road. Total damages amounted to more than three hundred dollars. The troublesome deer of Moraga had struck again.

All of us in Moraga are familiar with this problem. Many have not escaped as cheaply as we did from encounters with the deer. Winter nights can be especially treacherous when the weather worsens and the deer come to town in search of food. They leave their natural habitat in the canyons when the vegetation becomes scarce and come to dine on the proudly tended gardens and parks in town. Local gardeners rank deer as their most destructive pest, worse even than gophers and caterpillars. In addition to being a nuisance, deer are a health risk, since they carry diseases communicable to humans.

In fact, the deer problem is potentially lethal to us and to them. Nocturnal creatures, the deer invade our town at night. Traveling along the sides of our winding roads, they add to the danger of driving at night. Occasionally, for example, a deer will be frightened by the headlights of a car, and, in a moment of panic, run onto the road. It is all too often that the deer gets hit, the car is damaged, or both.

The question is, what can we do about the deer? The most cost-effective method of solving the problem is to allow hunters to shoot them. In fact, I have heard this suggestion offered several times, though I can't tell if those proposing it are serious. We must reject this proposal. For one thing, the possibility of a stray shot hitting a bystander is too great. Second, animal lovers would surely protest the inhumanity and cruelty of such a policy. Furthermore, this proposal would not even solve the problem, since it wouldn't prevent the surviving deer from coming to Moraga in search of food. We would have to shoot a good many deer in the area to solve this problem completely.

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Another possible solution that has been suggested is to capture the deer and relocate them to a national park or some other protected area. Although this is a more humane proposal, it is no more workable. Finding, capturing and relocating enough deer to solve the problem would be extraordinarily expensive. It has been estimated that this effort would cost our town over two hundred and fifty thousand dollars. The damage caused by the deer does not even approach that much money, so spending so much could not be justified. But even if we found the money, there is another reason why this proposed solution is not feasible. You see, we here in Moraga have a double standard: we want to keep the deer out of town, but we like having them in the canyon because it adds to the secluded, natural environment that helps to make Moraga special.

I would like to propose a solution that is both economical and practical: during the winter when their natural food supply is low, we should feed the deer, regularly, in the woods. Before the cold season starts, we should stock about a hundred food stations in the woods, located in areas known to have high concentration of deer. These spots can be found by trial and error: if we discover a station is not being used extensively, then we can find another location that is more popular. Once winter hits the area, volunteers can regularly monitor the food supply in these food stations. Deer feed is mainly composed of vegetation and finely mashed oats or wheat and so is inexpensive. Local residents could contribute grass trimmings and the like. Wheat or oats should cost approximately two thousand five hundred dollars a year, a hundredth of what it would cost to relocate the deer. This plan would allow us to keep the deer while eliminating the trouble they now cause.

Critics of this proposal might argue that the food stations would allow the deer to prosper too much, perhaps even creating a population explosion. This seems unlikely since the canyon is also populated with such natural predators as coyotes. My proposal keeps the deer out of town without requiring any physical handling of them. It is humane and economically feasible. It solves the problem by removing its cause: the deer's need for food.

The main structural elements of this text as a Proposal Making text may be outlined as follows

§§1-3 **Introduction and identification of problem and its consequences if left unsolved:** destruction & traffic danger caused by the deer

§ 4 **Alternative solution 1:**
- shoot the deer
Counterarguments:
- risk of personal injuries
- resistance from animal lovers
- surviving deer

§5 **Alternative solution 2:**
- relocate the deer
Counterarguments:
- too expensive
- we want to keep the deer

§6 **Own Proposal:**
- feed the deer at food stations
Supporting argument:
- it is inexpensive

§ 7 **Possible counterargument:**
- population explosion
Refutation of possible counterargument:
- ecological solution: coyotes
Supporting arguments:
- is cheap
- removes the cause (hunger)
- is humane.

As you have seen, this is a simple and clearly structured text, of the kind that an inexperienced student writer can identify and understand the structure of. Naturally, our students get several examples in order to improve their ability to identify the rhetorical purposes and structures of

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texts and to become aware of **characteristic features of the text type** in question. This training is intended to raise their text type awareness in order to prepare them for their own writing but also, naturally, to make them better readers of expository texts generally, in L1 as well as L2. Inherent in the process is the practice of critical thinking skills.

2.2. Writing (i.e. Proposal Making)

The study of model texts takes place within the prewriting phase. That step of the process also includes a structured working process that leads up to the first draft writing. Here we follow a step by step approach in order to encourage students to look at the writing task from as many perspectives as possible before committing themselves to a first draft. There are two obvious reasons for this procedure. First, the more materials students have at their disposal for writing, the better the piece of writing is likely to be. Second, inherent in the procedure of looking at something from different points of view is the exercise of critical thinking skills.

Prewriting activities for making proposals

1. Make a short list of problems that affect you personally in a group (family, sports club, gang etc.)
2. Choose one problem
3. Analyse the problem
 - * how important is it?
 - * what caused it?
 - * what bad effects might the problem cause if it is left unsolved?
 - * does the problem affect everyone in the group equally?
4. Brainstorm (with the help of tree diagrams, mindmaps, notes etc.) about the solution(s) you would like to propose

5. Make a list of alternative solutions that you can imagine other members of the group might suggest
6. Discuss your ideas with your response group
Ask for suggestions
7. Identify your readers; ask yourself questions like:
 - * how much do they know about the problem?
 - * why would they care about solving it?
 - * have they supported any alternative solutions?
 - * do they belong to any particular group, philosophical or political movement, that might cause them to favour or reject my proposal?
8. Write briefly (2-3 sentences) to refute some very common counterarguments like the following:
 - * we have never done it that way before
 - * we can't afford it
 - * people simply won't do it
 - * we haven't got the time
 - * what's in it for you?
 - * it may work elsewhere, but never in Kalmar ...
9. Think about a suitable way of organising your material: for instance, should you put your main argument first or last? Where should you take up counterarguments?
10. Write a first draft

After the first draft students follow the model of the writing process outlined above: they proceed to engage in response work with peers before revising and handing in their drafts for teacher response and further revision. They receive help with each step of the process.

For reasons of space and time I refrain from indulging in an account of the details of the later stages of the working process. I hope that the

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particulars I have offered from the early stages suffice to indicate the nature of our programme and what we hope to achieve with it, especially the elements that encourage the exercise of critical thinking skills.

3. Conclusion

In conclusion, I believe that an approach to writing instruction which is based on a holistic view of writing, and which focuses on different text types within the process model - I believe that such an approach holds out the best promise of helping our students improve their language proficiency at the same time as they develop their writing and critical thinking skills in L1 as well as L2.

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This issue of *Odense Working Papers in Language and Communication* contains papers presented at the 2nd Odense Writing Day held on May 21, 1993.

The range of topics is wide: the papers presented deal with research on writing as well as didactics, and with mother tongue and foreign language writing. In the field of mother tongue writing, socio-cognitive perspectives, writing profiles, and writing strategies are discussed. Foreign language writing is illustrated by a survey of empirical studies, an outline of different teaching methods, and a paper advocating writing as a thinking tool.



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