Writing(s) at the crossroads

The process-product interface

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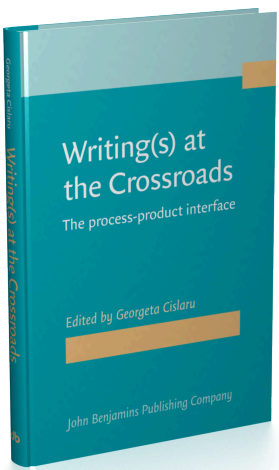

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The process-product interface

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Writing as a process and writing as a product are sometimes clearly distinguished, and sometimes confused. The two are studied in various domains: cognitive psychology, textual genetics, and anthropology are mainly – although not exclusively – interested in writing as a process, which they analyze from different perspectives; discourse analysis or text analysis, as well as corpus linguistics, are concerned with the product, i.e. the written text, or discourse, and its description or interpretation. One possible approach to grasping the process-product interface may be to confront disciplines and mix methodologies in order to determine to what extent the data that are provided by the study of the process are relevant to linguistic and interpretive approaches that focus on the functioning of the text as a product, and vice-versa.

Cross-disciplinary issues have been formulated in recent years from various theoretical standpoints (see Bazerman & Prior 2004; Torrance et al. 2012, for instance), and a number of works have examined the relationship between process and product, or attempted to establish clear connections between them. The pragmatics of writing developed in Perrin (2003a; 2013) is a perfect illustration of such a complex approach to writing. Perrin connects the explicit or supposed communicative intentions of the writer(s) with the writing strategies observed *in situ*:

> The central question of the pragmatics of writing […] is: what do people *want* to do when they write – and what do they *actually* do? Research attempting to explain natural, everyday writing tends to treat the writer as socially-bound, the written product as intertextually-bound, and the writing process as procedurally-bound. (Perrin 2003b, 825)

Although many researchers have formulated the question of the process-product interface, not enough efforts have been made to bring together tools and methodologies in order to promote constant dialogue between the different domains and formulate a twofold approach to the problem. The process-product interface may be analyzed through the language phenomena emerging both from the study of the process and from the study of the texts that are ultimately

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produced. While different methods are applied to these phenomena by different disciplines, to what extent can they be considered to be working on the same objects? Textual genetics already assumes porosity between the concepts and methods of the study of process and product (Fuchs, Gresillon, Lebrave, Peytard & Rey-Debove 2003; Doquet-Lacoste 2004; Fenoglio & Adam 2009). It would be fruitful to observe the articulations around linguistic features at the crossroads of psycholinguistics and text or discourse analysis. How are description and interpretation (explanation) correlated in the different domains that concern themselves with the study of writing, and how are they opposed? This volume takes a linguistic perspective to writing against an interdisciplinary background, and seeks to highlight more than one point of articulation between writing as a process and writing as a product. The context of writing, the text, and the modules and complexity of the writing process itself are put under scrutiny in order to confront and blend methods, postulates, units of analysis, etc.

1. At the crossroads between process and product

Writing is a communicative activity with its own specificities, associated to the media involved and to the particular temporality of the process. These specificities have been looked at by various studies from different perspectives. Strömqvist et al. (2006) emphasize the difference between speaking and writing, beyond the stylistic point of view. Both writing and interpreting a written text, they argued, require more empathy and imagination than the production-reception of oral texts (Brandt 1990; Strömqvist et al. 2006, 53). Kesseling (1992) examines the function of pauses in oral and written discourse, and tries to adapt the concept of prosodic structure used with oral productions to pauses during the writing process. Biber et al. (2004) compare linguistic data, and more specifically lexical bundles and idiomatic constructions, in oral and written texts. These specificities of written communication at different levels demonstrate the need to take an approach that is particularly tailored to the process and product of writing.

It was some time ago that the need for pedagogical applications of research on writing triggered the development of a two-sided conception of writing, as attested by numerous publications and methods in the hybrid teaching of writing, such as Donald D. Murray's "Teach Writing as a Process Not Product" (1972) or Gehle and Rollo (1977), which take the same line. Their companions to the writing process offer various linguistic clues to the relationship(s) between the text and the process of its composition.

Two fundamental questions seem to underpin the process-product articulation. The first is about interpretation, where the writing process is ascribed

an explanatory potential. The second is about constraints – which also have explanatory power, although their main role seems to be in helping to grasp the complexity of the activity of writing through its temporal, textual, memorial, visual, neurocognitive, etc., dimensions (cf. Berninger & Richards 2002; Olive et al. 2008; Olive & Passerault 2012; Plane et al. 2010). The study of the constraints that affect writing connects linguistics and psychology, in that mental activity is confronted with both the linguistic materials that are drawn on in the act of writing and the textuality of writing as a product. Sociolinguistics and anthropology are also involved, as shown in the chapter below on socio-anthropological approaches to writing (§ 4).

In terms of textuality, linguistic material, and pragmatic issues, the study of writing as a product is not separated from reflection on the process, even though the way the text is shaped more often than not remains "in the black box." The impact of social, cultural and institutional habits during the process of shaping and interpreting the text is detailed by Candlin and Hyland (1999), who studied writing practices from an interdisciplinary standpoint. The study of writing practices may also be considered as a cue to a better comprehension of texts (Bazerman & Prior 2004). Interpretive needs pushed Bhatia (1993) to propose a triple approach to text genres, from the point of view of linguistics, sociology and psycholinguistics, by examining the strategic choices of the writer, for example. Discourse analysis too is traditionally interested in the "conditions of production" (cf. Courtine 1981, for the French stream), although their effective relationship with the writing process remains unclear. Within the framework of Critical Discourse Analysis, Wodak (1992, 494 and 525) was interested in the relationship between text comprehension and text production, and argued that both are simultaneously cognitive and emotional processes. Two questions formulated by Wodak (1992, 494) are particularly relevant here: How does text comprehension (*Textverstehen*) differ from text production (*Textproduktion*)? And how does the understanding of a text (*Textverstehen*) differ from the interpretation of a text (*Textinterpretation*)?

It is evident that the writing process itself involves a certain anticipation of these questions, as the writer anticipates the later process of understanding and interpreting the resulting text. As such it is anchored in a double intertextuality (see also Bazerman & Prior 2004). Various constraints are thus at work in the writing process (Plane et al. 2010; Cislaru 2014).

In line with these findings, Grésillon and Perrin (this volume) argue that the collaborative study of writing in real-life situations – i.e. excluding laboratory data – is able to deal with the complexity of the writing act, which involves heterogeneous factors such as actors, media, environments, content, and textuality, as well as material, mental and social activity. The authors develop a cross-cutting

methodology that encompasses various types of constraints and processing situations, which constitutes a valuable advance in the study of writing interfaces.

One of the questions that emerge at this stage is the very definition of writing and of the act of writing (see also Delbreilh this volume), and its analytical force. In her paper, Plane (this volume) discusses the notion of the act of writing as a complex and heterogeneous activity, and highlights several aspects of the dynamics of writing both from the point of view of the process (temporality, writing operations) and from the point of view of the product (textuality). She notes the divergences between different approaches to the temporality of writing, and underlines their productivity in drawing out both the cognitive processes and the linguistic mechanisms involved in the writing process.

2. Writing as a process: Fine-grained viewpoints on the act of writing

The study of the writing process implies putting all stages and levels of the production mechanisms under scrutiny (see also Van der Geest 1996): i.e. the situation (professional, personal, educational context) that hosts and generates the act of writing and all the related pragmatic issues, the writer's behavior and specific gestures (eye movements, pen or keystroke activity, etc.), the use of sources (books, Web sources, oral exchanges and discussions, etc.), the timespan involved and its relationship to previous stages and levels (length, pauses, fluency, etc.), the space which is exploited (pages, back-and-forth movements, etc.), the material produced and its qualities (linguistic description, operations involved, etc.). Until now, these aspects have been split among various disciplines, as mentioned above.

In terms of either a complex longitudinal path or a dynamic falling within temporal constraints (the real time of writing, for example) and revealing the way the text is shaped, the process involves various dimensions, such as:

- the context of production (social, cultural, historical, physical);
- the articulation of writing practices with socio-cognitive habits: domains such as literacy and the anthropology of writing contribute to the description of these practices and help to situate writing within contexts that require additional interpretation (Barton & Papen 2010a; Fraenkel 2007);
- the steps of the writing process, such as composition and revision (Fuchs et al. 1987; Fenoglio & Chanquoy 2007), and their temporality (van den Bergh & Rijlaarsdam 1996);
- the mental operations postulated by cognitive psychologists (Hayes & Flower 1980; see Alamargot & Chanquoy 2001, for a review);

– the "real-time" process, recorded by keystroke logging programs (like Inputlog, see Leijten & Van Waes 2006 and Leijten et al. this volume; ScriptLog, see Sullivan & Lindgren 2006; Leblay and Caporossi this volume, etc.). Spelman Miller and Sullivan (2006, 2) speak of a "writer- (rather than text-) based perspective on writing."

The recent development of digital tools (see Van Waes & Mangen 2012) as well as the development of cognitive psychology (Berninger 2012) have made possible increasingly complex insights into the process of writing, and allowed the collection and analysis of quantitative and statistical data (Perrin & Wildi 2010). These approaches are mainly based on psychology, the cognitive sciences and the computer sciences. They open up access to what can otherwise look like the "black box" of writing activity: memory (Olive et al. 2008), pauses (Kesseling 1992; Olive et al. 2009), revision dynamics (Severinson-Eklundh & Kollberg 2001; Allal et al. 2004), etc. On the content side, Baaijen (2012) – among others – discusses the creative dimensions of the writing process and the ways that writing influences knowledge and ideas. On the formal side, some recent studies seek to articulate linguistic description to real-time data (see Leijten et al. 2012; Macken et al. 2012).

Leijten, Van Waes and Van Horenbeeck (this volume) take the integration of linguistic analysis with keystroke logging a step further. Their paper offers an original point of view on the writing process; for the first time, it proposes to use linguistic data from the writing process as a basis for neuropsychological tests to diagnose Alzheimer's disease. They thus articulate the linguistic dimension of the writing process to product data, and offer an interpretation of both in terms of linguistic processing phenomena.

Galbraith and Baaijen (this volume) develop the concept of a dual process of writing, which implies conflict between a system designed for constructing objects and a system designed for action. Insofar as content is built throughout the writing process, product and process are inseparable, with writing modelling the individual's thoughts in accordance with culturally and socially shared norms. The authors argue that text production is an active knowledge constitution process, that the knowledge object, the final content of a written text, emerges during this process, and that different memory systems are involved in writing processes in a complex way.

From a different standpoint, Fenoglio (this volume) points out the elaboration of theoretical thinking through the writing process, by following parallell linguistic (lexical, syntactical) potentialities in the drafts of Saussure's and Benveniste's texts. The broken linearity of the graphic traces clearly reflects a process of assembly.

Leblay and Caporossi (this volume) show that the study of the product alone does not permit an understanding of the process and dynamics of writing. They

examine revision operations within the writing process and the representation of their spatial and temporal characteristics, based on real-time data from keystroke logging. The final visualization, supported by the mathematical theory of graphs, highlights the use of different linguistic strategies depending on the writer's skills.

Among the questions that may be formulated at this stage are those of what the context of writing and the writer's abilities can reveal about the text, and vice versa. There is a tight relationship between the simplicity of discourse constraints and the possibility of mastering them, which is assimilated to discursive competence (Hymes 1971; Maingueneau 1984, 51). Writing competence and performance can be connected to specific constraints, such as genre specificities (Cislaru and Lefeuvre this volume), professional writing skills (Brunner and Pordeus Ribeiro this volume; Doquet and Poudat this volume; Olive and Cislaru this volume), neuropsychological skills (Leijten et al. this volume), etc.

3. From text to process, and back: What the text is

The process of writing involves a theory of discourse and meaning construction, as noted by Flower (1994, 5 et seq.). Can the features of discourse be disconnected from its practice? The answer is no. Indeed, as Stubbs (1997, 104) points out, "a text is seen as a series of traces left by the processes of production," and it is difficult to interpret the traces outside of the process. In line with this observation, Stubbs (1997, 110) proposes an ethnographic study of actual text production. "Writing as Text" is also the title of Part V of Bazerman's (2007) *Handbook of Research on Writing*, which clearly confirms the necessity of articulating the results of linguistic research on finished texts (see, for instance, Schleppegrell 2007) with data from multi-disciplinary research on writing as practice and process. On the other hand, Sanders & van Wijk (1996) propose to use text analysis to identify writing strategies. It is important to take into account the non-transparency of results and data on both sides, insofar as the different methodologies and aims at work shape the interpretation of the data.

The practices of discourse analysis and corpus linguistics, for instance, invite fine-grained text analysis, which takes into account various linguistic and structural parameters. The thorough methodologies applied in these areas suggest a need for caution with regard to certain speculative conclusions about language, production, and constraints.

Sinclair's (2004) book *Trust the Text: Language, Corpus and Discourse* is rather suggestive in this respect. Corpus-driven linguistics offers new insights into language structure, and even into the semantic-grammatical profile of linguistic units. It is indeed a privileged way to observe language in use and to obtain a global

view of discourse based on large corpora. The study of patterned data (cf. Sinclair 2004; Biber et al. 2004) reveals regularities and offers information about language structure and product(ion). The lexical/pattern grammar that has been developed in these studies raises some questions about the production process, insofar as its application in the domain of language acquisition inherently attests to a usage/norm, but does not serve in itself to explain the underlying process.

> We should be open to what it [the text] may tell us. We should not impose our ideas on it, except perhaps just to get started. Until we see what the preliminary results are, we should apply only frameworks that are loose and flexible, in order to accommodate the new information that will come from the text. We should expect to encounter unusual phenomena; we should accept that a large part of our linguistic behaviour is subliminal, and that therefore we may find a lot of surprises. We should search for models that are especially appropriate to the study of text and discourse. (Sinclair 2004, 23)

The choice of the units of analysis is a crucial step in the study of writing interfaces. Tolchinsky et al. (1999) distinguish between generic (roughly, discourse types and genres, from a pragmatically oriented perspective) and microscopic approaches (taking into account specific linguistic features, following Biber's approach [2009; Biber et al. 2004], for instance). In corpus linguistics, macro- and micro-features are often associated (see Bednarek 2009). But the complexity of the writing process and the theoretical principles that frame approaches to process and product influence the interpretation of data. It is clear, for example, that the adoption of either the product or the process viewpoint determines the nature of the units of analysis, such as linguistic forms or temporal data.

Olive and Cislaru's paper (this volume) investigates the nature and interpretation of corpus linguistic data by comparing the linguistic structure of bursts of writing (which represent the routinized dimension of the writing process) and of repeated segments (considered in the literature as routine elements of the text as a product). The results highlight interesting differences between the two categories of data, and show that linguistic data that may be interpreted as routines when analyzing the product probably do not function as routines at the process level. The paper also offers hints on the nature of the gap between process and product and its impact on theoretical and methodological choices.

The notion of text itself is also subject to discussion. In our societies, texts are framed by various constraints of status, production, authorship, etc. From this point of view, a text cannot be reduced to a series of traces left on a medium. Fenoglio (this volume) sees *the* text – the result of a linearization process through manuscripts and drafts (see also de Beaugrande 1984 on the linearity of text composition) – as ended, closed, as soon as it is submitted to an editor, as soon as it passes from the private to the public sphere, etc. Mahrer et al. (this volume) argue

that, despite editorial constraints, a literary text bears its textuality long before it is published, and may continue to evolve beyond publication.

4. Writing in context: A socio-anthropological approach

The process-product interface may be examined at a "macro" level that attempts to articulate the contextualized, ideological, interactional, and engaged aspects of writing (cf. Ivanič 1998; Pearce 2010 on the relationship between writing and identity construction; Hyland 2005, with the notion of metadiscourse) and the discourse itself. Written and oral texts have been scrutinized by disciplines such as discourse analysis and sociolinguistics (see Wodak 1992; Boutet 1997; Branca-Rosoff & Schneider 1994) from an interpretive perspective, in an attempt to uncover social, cultural and historical principles through text analysis. The study of the writing process in itself and a literacy viewpoint offer new insights into the relationship between language practice (more specifically writing activity) and other social practices.

The core interest of the anthropology of writing is "to examine the processes of production and use of texts" (Barton & Papen 2010b, 7), from the perspective of a strong relationship between writing and social practices:

> Examining written texts is essential for understanding how societies operate and are organized, how institutions communicate with the public, how work is being done, how individuals and social groups organize their lives and make sense of their experiences and how cultures in all their variations are produced and reproduced. (Barton & Papen 2010b, 5)

Literacy studies are more generally socioculturally and anthropologically grounded. As recalled by Gee (2000, 189), New Literacy Studies (NLS), mainly grounded in the anthropology, "is based around the idea that reading, writing and meaning are always *situated* within specific social practices within specific Discourses," where the notion of context is seen from the viewpoint of its dynamics. A context-dependent approach could also be of help given that the conditions of production, which are embedded in a specific situation, are not identical to the conditions of reception, and a fine-grained definition of the context is thus required for a thorough interpretation of the studied phenomena.

The sociocultural theory of writing (see Prior 2004, 2006) offers clues to understand the complexity of the interface, in the line of Vygotsky's thought:

> Sociocultural theory argues that activity is *situated* in concrete interactions that are simultaneously *improvised* locally and *mediated* by prefabricated, historically provided tools and practices, which range from machines, made objects, semiotic

> means (e.g. languages, genres, iconographies), and institutions to structured environments, domesticated animals and plants and, indeed, people themselves. Mediated activity involves *externalization* (speech, writing, the manipulation and construction of objects and devices) and *co-action* (with other people, artifacts and elements of the social-material environment) as well as *internalization* (perception, learning). (Prior 2006, 55)

In his paper, Prior (this volume) gives a sound illustration of the sociocultural approach to writing, offering an exhaustive overview of the complexity of writing and the writing process. He underlines the dispersed, distributed and laminated chronotopic structure of the writing process, and relates these to its heterogeneous mediation by tools, practices, other people, etc. In this light, he formulates a new definition of writing: "Understood as a blend of texts, persons, activities, meditational means, and social formations/practices, writing appears as temporally and spatially stretched out trajectories rather than as punctual events in a narrow and isolated here-and-now."

In the framework of the anthropology of writing, Delbreilh (this volume) advocates taking into account the whole set of heterogeneous aspects of the writing process: linguistic, graphical, material, situational. All of these aspects may be understood as action-oriented, writing being a pragmatic act. The writing act (Fraenkel 2010) is thus seen as an essential part of collective action in literate societies.

Externalization and co-action imply the Other, as a potential reader of the text. Writing transforms discourse into a public good, a text-for-the-Other, its legibility being a condition of its existence and social perception. For instance, Cislaru and Lefeuvre (this volume) show how the private vs. public nature of writing determines linguistic choices in different discourse genres. Fenoglio (this volume) connects the linearization process that transforms an assembly of parallel data and forms into a linear textual construction with the constraints of the public sphere.

Brunner and Pordeus Ribeiro (this volume) connect linguistic production with exterior constraints that create a tension between subjective and objective stances. Text revision recorded during social workers' production of successive drafts of reports reveals the influence of the social institution, and shows that the contextualization of corpus data is a first step toward their interpretation. Finally, they show that not only the final text as a product, but the whole process of writing and editing is oriented toward maintaining the smooth functioning of the institution. They thus examine the interactions between text producers and their texts throughout the whole series of revision operations leading to the final text, in a way that confirms the character of (written) communication as "social engagement" (cf. Hyland 2005).

5. The volume

The chapters in this volume are united by their approach to examining writing at the interface. Each chapter offers methodological cues (see in particular Grésillon and Perrin this volume, Plane this volume, Prior this volume) for the joint study of both process and product. The actual indivisibility of process and product is the underlying theme of the volume, and it is particularly prominent in Galbraith and Baaijen (this volume). Although the individual chapters do not focus equally on process and product, as one or another dimension dominates in accordance with the theoretical framework adopted by the authors, each study confronts process and product in one way or another. Moreover, the diversity of approaches brings to light different features of the interface, depending on whether the point of departure is the product or the process. Some papers question the nature and the identity of the product in light of the dynamics of the process (see Mahrer et al. this volume; Cislaru and Lefeuvre this volume); others propose new descriptive categories which might better fit a unified approach to process and product (see Olive and Cislaru this volume).

The volume is structured in five sections.

Part One, "Some core questions about writing," points out various difficulties and proposes or confronts new methods in the study of writing.

Plane (this volume) presents a concise and enlightening history of questions about writing in its multiple facets, and more specifically from the product vs. process viewpoint in the field of teaching. She points out the difficulties for writers of grasping writing as both object and act(ivity), as well as the resulting product, the text, and notes how more traditional approaches to texts and writing have evolved towards chronometric methodologies with the support of technological advances. Ultimately, it is impossible to completely capture the dynamics of writing, but seeking to do so offers interesting insights into the writing process and linguistic functioning.

Grésillon and Perrin (this volume) advocate for a study of writing informed by applied linguistics, and thus conceived as "a joint activity of researchers, practitioners, and society at large." They bring together two methods developed in specific contexts: the *Idée suisse*, developed around Daniel Perrin in Zurich and that examines writing-in-context in the newsroom, and critical genetics, developed in Paris (see Hay 1996; Anokhina & Pétillon 2009) and illustrated by the study of the drafts and revisions of Heine's poem "Lebensfahrt."

Part Two, "Linguistic forms and choices at the interfaces," brings together three papers which offer different insights based on the same corpus data, the reports of social workers' on children, which are addressed to judges.

Cislaru and Lefeuvre (this volume) analyse the use of verbless sentences in the corpus of social workers' reports on the one hand, and in a corpus of diary entries with associated letters, on the other hand. They combine a longitudinal study of the drafts of the reports and a contrastive study of discourse genres in order to explore the impact of the private vs. public dimension of the constraints on the writing process.

Brunner and Pordeus Ribeiro (this volume) cross linguistics and a sociogenetic approach. They offer a detailed analysis of revision operations, and address the question of linguistic choices in writing. Alongside interesting linguistic observations illustrating discourse adaptability (cf. Verschueren & Brisard 2009, 40 et seq.) – in terms of intensity, for instance – this paper highlights the imbrication of writing and social practices or, more precisely, sheds light on the nature of writing as a social practice.

Olive and Cislaru (this volume) present a linguistic description of psycholinguistic units of analysis: bursts of production. This original approach, which combines linguistic description, textometry and cognitive psycholinguistics in an examination of real-time data, offers an interesting viewpoint on how writing data can be categorized and interpreted, and highlights a discrepancy between aspects of product and process that are respectively viewed as "routine."

Part Three, "Tracks and traces of the writing process," illustrates the archeology of writing through the approach of critical genetics. The first two papers look at the phenomenon of coexistence (of different versions, formulations, semiotic means…) and its importance in the interpretation of both process and product.

Fenoglio (this volume) examines scientific (Saussure, Benveniste) and literary texts and *avant-textes* (drafts), both manuscript and computer-typed. The author emphasizes the delinearization of the writing process, which is mainly visible in manuscripts, where parallel versions coexist. This visibility brings meaning construction close to the reader and offers the possibility of decoding from various standpoints.

In a slightly different framework, editorial genetics, Mahrer et al.'s paper (this volume) offers a fine-grained description of the phases that characterize literary text production and focuses on rewriting processes after initial publication. The authors perform a modular linguistic analysis supported by automatic analysis, going through several levels of analysis, from word to text, and including punctuation. The notion of "variation," which involves the coexistence of two objects (two versions of the same text, two equivalent words, etc.), is central to the paper.

Leblay and Caporossi (this volume) go beyond the recording and description of revision dynamics from an exclusively temporal point of view, and offer a legible spatio-temporal representation of different writing strategies according to

personal writing skills (see Lindgren et al. 2008 on writing skills development). Their concise semiotization of the writing process helps to draw out patterns in the complexity of revision. Moreover, it confirms that writing is a specific form of communication, anchored in specific conditions of production.

In Part Four, "Writing practices in context",

Prior (this volume) presents several case studies that illustrate the chronotopic lamination of writing activity. He argues that texts as a product of writing are non-autonomous, and shows that writing involves multiple semiotic resources. The notion of *semiotic remediation*, which argues for a dialogic approach to all semiotic practices and performances, and the notion of *literate activity*, a confluence of streams of activities (reading, thinking, talking, feeling, etc.), are meant to favor full accounts of writing.

Delbreilh (this volume) presents an original study of leaflets from a feminist protest march in 2011. Taking a complex approach to writing as an act and as part of collective action, the author observes all steps in the performativity of the distributed writings, from their making – composition of the text, layout, printing – to the strategies applied in handing it out, and argues that the stages of production and dissemination are part of the writing act.

Doquet and Poudat (this volume) carry out a fine-grained textometric analysis of inspection reports in primary school. They highlight the multiple entanglements between the laminated writing process (see also Prior this volume), genre and institutional constraints, and personal styles. They also emphasize the interdependence of lexical choices and the strength (but not the polarity) of assessments. A thorough analysis of lexical choices and distribution in the texts allows the authors to identify writing styles and categories of writers.

Part Five, "Cognitive insights through writing studies," articulates methods of writing research to core questions on human cognitive processes and capacities. Linguistic data, although approached differently in the different chapters, are central to each of these approaches, insofar as they offer access to various cognitive features and enable the assessment of cognitive competences.

Galbraith and Baaijen (this volume) interconnect writing processes, knowledge change, and text quality in order to examine the relationships between global planning processes (see also Torrance & Galbraith 1999), implicit text processing, and individual self-monitoring in writers. They discuss the way process organization (for instance, synthetically planned text production and other drafting strategies) determines the understanding and processing of ideas, and identify different types of writers: for example, high vs. low self-monitors, writers who prioritize either rhetorical or dispositional goals, and writers who develop their ideas under different writing conditions.

Leijten, Van Waes, and Van Horenbeeck (this volume) argue that the writing process may be a valuable observable, and could increase diagnostic accuracy for Alzheimer's disease if looked at through its cognitive and linguistic aspects. This approach enables the inter- and intrapersonal comparison of writing characteristics in demented and healthy elderly. The paper explores the keystroke logging approach, comparing several tools (Inputlog, Scriptlog, and Translog), and then details the linguistic analysis module of Inputlog, which includes a part-of-speech tagger, a lemmatizer, a chunker, a syllabifier, and also word frequency information. It demonstrates the importance and added value of taking into account the linguistic devices and mechanisms at work during the process of writing, as well as patterns of pauses between words, notably when testing the cognitive-linguistic capacities of demented and healthy individuals.

Based on empirical writing data, either real-time or archived drafts, this book aims to contribute to the development of an interpretive approach to writing and its dynamics. It gives an overview of the state of research on the process-product interface through a range of viewpoints on process, product, and the links between them. Collectively, its chapters explore the possibility of establishing a coherent path from the real-time dynamics of the writing process to the product anchored in its formal dimensions and its pragmatic functions. The result is a look at how results and concepts from different domains may support each other in the development of a mixed approach to the process-product interface.

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