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Content and Formulation

Writing Argumentative Texts in Pairs

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ABSTRACT: The article proposes a new way of looking at the relationship between content elaboration and formulation during the production of written argumentative texts. It is hypothesized, that younger students elaborate contents by formulating them, whereas in older students both processes are clearly distinguished. 8 pairs of students aged 10 and 14 and adults with academic background produce a text in a collaborative situation. Three aspects of the production of the first and the last sentence are analyzed in looking at the recorded dialogues: elaboration of argumentative plans; the independent elaboration of contents; the variation of linguistic forms. The results give the hypothesis credit and show a deep reorganisation of the production process of argumentative texts in ontogenesis.

KEY WORDS: Writing, argumentative texts, development, text planning, content elaboration, formulating, collaborative writing

Even more than for other texts types, the relationship between contents one has to generate and the formulation one has to find to express it in language is crucial in argumentative texts. I will show in this paper, that this relationship undergoes an important transformation between the age of the beginning of mastering writing – say in children who are 10 years old – and average mastery of argumentative texts in adulthood. Even if the basic architecture of the language production system as described by numerous psychologists (Levelt, 1989) remains roughly the same, writing, as Vygotsky asserted it already in the thirties, reorganises 'the previous psychic system of oral language' (Vygotsky, 1985, p. 261). In the seventies, Karmiloff-Smith (1979) suggested to take into consideration language development after five. Argumentative texts show that one has to speak about language development after ten.

In fact, different authors have already pointed out that important changes take place, in function of age and learning, in the production of written argumentative texts. In their studies dedicated to these texts, Scardamalia, Bereiter and Steinbach (1984) for instance distinguish two types of functioning: younger students use a 'knowledge-telling strategy' 'reducing writing assignments to topics, then telling what one knows about the topic' (Bereiter, and Scardamalia, 1987, p. 300) whereas older students elaborate their text through a dialectical relationship between discourse form on one

hand and content elaboration in a content space on the other. In different contributions, Golder (1991, 1992; see also Golder and Coirier in this issue) shows that younger students, up to 13 or 14 years old, tend to construct their argumentative texts as a chain of justifications whose basic structure can be described as: 'I think X, because W and Z'. The capacity of taking into account other points of view on a debated question and of integrating them into a text, i.e. of constructing an argumentative text as negotiation in a complex communicative setting, appears only after this age. Feilke (1988, 1989) distinguishes four types of text patterns for written argumentation, representing four stages of development: 1. subjective-linear patterns, each content triggering the next; 2. cognitive-systematic patterns, the internal structure of contents, as seen by the writer, structuring the text; 3. formal-systematic pattern, formal text structures being imposed to contents which more or less fits in them; 4. dialogic-linear patterns, the writer constructing a linear dialogic structure for a given addressee. In this last pattern, content and form are determined by the given goal and by the given addressee, in other words, texts are really contextualised. This last form is generally used only by older students, 16 or even 18 years old.

The aim of the present paper is to address the topic of the complex relationship between content and form – described as knowledge telling versus knowledge transforming strategy by Bereiter or more precisely depicted by Feilke through his four basic text patterns – in observing not only the given text, i.e. the result of the production process and in inferring from the result the underlying operations, but in trying to describe the production process of argumentative texts itself. On-line analyses of written text production is classically done through thinking aloud protocols (Hayes, and Flower, 1980) or through the analyses of speed and pauses in writing (Matsushashi, 1981, see also Foulin, Fayol, and Chanquoy, 1989) The first method is difficult to realize with younger students whereas the second one is not well suited to gain insights in the complex process of relationship between content and formulation. For these reasons, still another method will be used in this paper, namely collaborative writing which requires an at least partial exteriorisation of the internal operations.

Dialogs held during collaborative text production have already been analyzed by several authors from pragmatic (Dausendschön-Gay, Gülich and Krafft, 1989) or pedagogical points of view (Daiute and Dalton, 1992), but have only recently been systematically been proven to be a fruitful method of research on writing and been exploited as a means of research on writing process itself. In an analysis of the oral interactions between three adolescent students (13–14 years old) during composition of a text on racism, Camps (1992) shows that the majority of revisions take place during the writing itself of the text. These revisions include all major levels of text production: planning of the text as well as linearisation (construction of syntactical structures, search of vocabulary, choice of cohesion markers, solution of orthographic problems). Camps distinguishes between

two levels of revision during composition: those affecting orally elaborated plans for the contents and the form of the text, and those affecting what she calls 'intended text', i.e. orally produced utterances (clauses or part of clauses) designed to be written. Bouchard (1992) analyzes the interactions of two students producing a written mathematical discourse and two others, producing an explanation of the functioning of political institutions. In the first analysis, he shows that most aspects of written language production appear at least once in the interaction: planning of text, elaboration of contents for the text, different aspects of syntax (clause complexity, connectors, anaphora), lexical choice, material presentation of text. The second analysis proves that one can distinguish two major levels in the production process as revealed by the interaction: one labelled 'prelinearisation' and which concerns *what* is to say; the other labelled 'linearisation' or '*mise en mot*', and which concerns *the way* it has to be said, including discursive and syntactic integration of clauses. Changes on the first level affect heavily the sense of what is said, whereas changes on the second level modify mainly form.

In the present study, I will concentrate, as already stated, on some aspects of the relationship between content elaboration and formulation. To do this, we distinguish the following general aspects in the text production process: there are on one hand pre-linguistic planning processes with two major processes, one dedicated to the elaboration of contents and the other to the elaboration of argumentative plans in function of context; there are on the other hand processes of linearisation or formulation,¹ which elaborate the surface form of the text (lexicalisation, phrase and clause construction, connexion and segmentation of clauses; cohesion and modalisation; for more details see Schneuwly, 1988).

The general hypothesis put forward in this paper is that for younger students, these three main processes – the two aspects of planning and the formulation – form a single unity; they are completely linked one to another, each functioning together with the others. In older students the processes become more independent and by this way become more controlled and more accessible to discourse and to conscious reflexion. The changes observed in the way students of different ages produce argumentative texts are thus due to an important change in the speech production system itself. More concretely speaking, the following phenomena are hypothesized in the dialogues of collaborative writing:

- in younger students, content elaboration and formulation is not separated; content is elaborated through its formulation;
- older students will be able to elaborate contents partially independently of its concrete linguistic form; inversely, different forms will be elaborated for the same content;
- in adults, the relationship will become more dialectical, form and content conditioning each other in function of argumentative plans and strategies defined for a given context.

METHOD AND SUBJECTS

The following procedure was used to elicit argumentative texts and the dialogues accompanying their production: Two students in a school environment were asked to write together an argumentative text on homework. At the time of the research being conducted, this topic was vividly debated in newspapers, parents and teacher associations and even in classes. The writing task was presented like this: the official journal of primary education will organize a debate for and against homework at which everybody can participate. The ones who are against homework will write a text entitled 'Stop homework' to convince parents, teachers and students; those who are in favor of homework will write a text entitled 'Homework is necessary in primary school'. After this instruction, a taperecorder was put on and the experimenter left the room leaving students alone.

Eight pairs of students aged 10 and 14, attending normal public schools in socially mixed areas of Geneva, half boys and half girls, and adults with academic background (teachers, engineers, university students) produced 24 texts and dialogues. All dialogues were entirely transcribed with some indications on prosody (question, irony, laughing, etc.) The length of the dialogues varies between 10 minutes up to one hour. Note that the differences in length of sentences and dialogues are not statistically significant in function of age groups. The texts however differ very significantly in length (mean number of words: 71, 149 and 222 for the three age groups).

The length and abundance of material makes it impossible to analyze the whole dialogues in one time. I have therefore chosen to concentrate on two strategic sentences in argumentation: the first and the last one. Another methodological choice has to be taken for the sake of brevity: I won't show the dynamic dimensions of the elaboration of the sentences but concentrate on the presence or absence of certain aspects of text production relevant for the hypotheses exposed just before. Three criteria were used to show these differences: elaboration of text plans; independent content elaboration; free variation of form.

STUDY 1: ELABORATION OF ARGUMENTATIVE TEXT PLANS

The first criteria – elaboration of a text plan – concerns the ability the students have to treat contents formally, on an abstract level, independently of their concrete linguistic form. More concretely, it concerns the ability to take into account the general structure of the text to be written or to situate the work done locally on a given sentence or a given content in the more global perspective of the text as a whole.

Method of analysis

The following indicators were used to detect this ability in the dialogues:

a) Speaking about parts of text

A *ouais mais alors attends on va peut-être commencer l'introduction? hmm je vais marquer hein alors introduction alors qu'est-ce'on pourrait mettre? (Anne et Bruno, 14 ans)*

(A *yes but then wait we will perhaps begin the introduction? hmm I will write hm then introduction then what could we put? (Anne and Bruno, 14 years old)*)

M *il faudrait conclure euh*

H *mhm mhm moi j'ferais – u une proposition pour euh – pour garder – l'aspect positive des devoirs (Huguette et Michel, adultes)*

(M *on should conclude euh*

H *mhm mhm I I would make – a a proposition for euh – for maintaining – the positive aspect of homework (Huguette and Michel, adults)*)

b) Locating arguments in the text

G *nous on a deux arguments*

O *les arguments – c'est ça et ça – deux – c'est un peu peu*

G *un peu peu*

O *mm pf pf – (23 sec) (Raphaël G et Raphaël O, 14 ans)*

(G *we have two arguments*

O *the arguments – it's this and this – two – its a bit few*

G *a bit few*

O *mm pf pf – (23 seconds silence) (Raphaël G and O, 14 years))*

c) Using linguistic forms to indicate that one is in the conclusive phase of the text, the content being elaborate afterwards

C *oui attends (interruption)*

D *t'écris en résumé (Cécile et Daniel, 14 ans)*

(C *yes wait (interruption)*

D *you write to sum up (Cécile and Daniel, 14 years))*

Results and discussion

The differences between the three age groups in function of this criterion are important: only one dyad of the ten years old speaks once about a text part, namely the end:

G *top à la ligne et puis end the end de l'histoire d'amour – voici les multiples raisons – pour vous convaincre de faire cesser les devoirs*

C *c'est vrai attends on pourrait rajouter un petit truc*

G *non ça va (Grégory et Cintia, 10 ans)*

(G *top new line and then end the end [in English] of the love story – these are the numerous reasons – to convince you to stop homework*

C *that's true wait we could add a little thing*

G *no it's all right (Grégory and Cintia, 10 years))*

Half of the dyads of the 14 years old and 6 of the 8 adult dyads treat at least once the problem of text parts. This can be a quite extensive dialogue like in the following example:

R *on fait comment?*

A *je crois qu'on essaye de présenter dans un premier temps euh l'enjeu*

R *dans quel sens? – (6 sec)*

A *c'est-à-dire ce qui serait bien dans l'introduction c'est de voir de façon euh très brève les arguments de ceux qui sont contre les devoirs – j'sais pas pour ensuite procéder selon une antithèse – tu vois c'que je veux dire en deux mots*

R *très bien ouais*

A *certains j'sais pas affirment que les devoirs prennent trop de temps ou bien euh*

R *– sont inutiles*

A *sont inutiles euh assomment l'élève – tu vois ce genre de choses et puis ensuite on argumente mais alors contre ceux qui s'opposent aux devoirs ou bien?*

R *oui c'est une bonne idée*

A *sinon je vois pas très bien comment*

R *non parce que soit sinon on peut procéder de manière plus banale euh – avec une phrase introductive euh faire comprendre qu'on est d'accord qu'on est pour les devoirs*

A *mhm mais j'aime bien cette idée de récuser*

R *ouais c'est plus intéressant (Raffaella et Alexandre, adultes)*

(R *how do we do?*

A *I believe that we try to present first euh the stake*

R *in which sense? – (6 sec.)*

A *that is what would be good in the introduction is to see the way euh very brief the arguments of those who are against homework – I don't know to proceed afterwards following an antithesis – you see what I mean in two words*

R *very good yeah*

A *some people I don't know maintain that homework takes to much time or euh*

R *– is useless*

A *is useless euh bores stiff the pupil – you see this kind of thing and then we argue but then against those who are opposed to home work yes?*

R *yes it's a good idea*

A *otherwise I don't see very well how*

R *no because otherwise one can procede in a more banal way euh – with an introductory sentence euh to explain that we are in favour that we are for homework*

A *mhm but I like this idea of challenging*

R *yeah it's more interesting (Raffaëla and Alexandre, adults))*

Obviously, the younger students do not operate on abstract units of argumentative discourse like 'introduction', 'arguments' and do not use strategic notions of argumentation like 'challenging' or 'proceed in a banal way' to elaborate their text. On the other hand, one can see that even in adult dialogues, abstract reasoning on the text plans is not practiced very often, although adults can do it when they have to. Short texts with a quite simple argumentative structure like the ones we have elicited on homework do not ask for a very deep reflexion on text planning.

STUDY 2: INDEPENDENT CONTENT ELABORATION

The second aspect analysed concerns the ability to discuss and to elaborate contents during text production without directly formulate them for the text. Content elaboration can have different points of departure: it can precede formulation of every kind, being based on what has already been said or on notes taken before; but it can also be based on a partial formulation of a content or even be induced by a stereotypical formula which indicates the kind of content that will follow (for instance a number pointing to a new argument or a linguistic unit like 'for this reason' which entails a conclusion). The crucial aspect of independent content elaboration is that at a certain moment in the dialogue the content is discussed *per se*, independently of the formulation it will take afterwards. To put this idea in Camps (1992) words: the dyad doesn't work yet on the level of the *intended text*, i.e. which is the orally produced text to be written, but on the level of a schematic content, of an 'idea' for the text.

Method of analysis

Different indications were used to detect when a dyad makes a clear distinction between aspects of content elaboration and of formulation. The most important are expressions the following:

- *alors on écrit quoi*
- *alors on marque ça*
- *alors on pourrait écrire comme ça dans notre article*
- *je ne sais pas comment formuler*
- *il faut dire. . . .*

- (– *so what do we write*
- *so we put that*
- *so we could write it like this in the article*
- *I don't know how to formulate*
- *one has to say. . . .*)

Expressions like these *follow* necessarily a part in the dialogue – it can last one sentence or ten minutes – in which the students propose a content or an idea whose form is clearly marked as general, as not yet elaborated, as vague, as stylistic unfinished and which still has to be treated on its content side and not on its linguistically formulated side.

The following examples show how this can work in the dialogues:

A *voilà – (10 sec) alors là on va peut-être terminer en nuancant quelque peu eee à propos des devoirs personnalisés ouais (Raffaela et Alexandre, adultes)*

(A *that's it – (10 sec) so here we will perhaps finish by qualifying a little bit eee concerning personal homework yes (Raffaela and Alexandre, adultes)*)

P *alors qu'est-ce qu'on va dire?*

A *bon il faut dire d'abord pourquoi ils sont nécessaires – les devoirs*

P *ah non non non non*

A *expliquer*

P *non non non non logiquement il faut commencer qu'est-ce que c'est un devoir – tu as déjà mmm mis en doute*

A *ouais*

P *le concept même du devoir – qu'est-ce que c'est (Alicia et Paul, adultes)*

(P *so what shall we say?*

A *well one has to say first why it is necessary – homework*

P *oh no no no no*

A *explain*

P *no no no no logically one has to begin what is homework – you have already mmm questioned*

A *yeah*

P *the concept itself of homework – what is it (Alicia and Paul, adults)*)

Of course, the distinction between content elaboration and formulations is not to be taken as an absolute one; there is mostly an important interaction between them, but this presupposes that content can, at a certain moment, be taken apart, be looked at *per se*, independently of the form it will take.

Resultats and discussion

The differences between the age groups in function of the criterion just defined are most important. Whereas one can find only one instance of independant content elaboration in the 10 years old dyads, 5 of the 8 dyads

of the 14 years old and all adult dyads contain at least one occurrence of such a distinction made in the dialogue.

This means, to put it in more general terms, that for younger children who are producing an argumentative text, content elaboration is at the same time formulation; or to put it in other, more precise terms, *content is elaborated through its linguistic and textual form*. Younger students think at the possible contents through their linguistic formulation. Thinking at contents independently of their final use in the text, and that means independently of their form, seems not to be in their reach. Discussions about contents take very rarely place; formulated contents are generally replaced by other possible formulated contents. In this sense, it is not precise enough to say that the text production is content driven or that children use a 'knowledge telling strategy'. Contents – knowledge – appear in a given, although very often rudimentary, textual form, namely an argumentative one, characterized by certain linguistic expressions like 'we think', or 'because'. The corollary of this phenomenon is that a content has, so to speak, only one form and that form variations of content are not really accessible to children in argumentative texts.

STUDY 3: VARIATION OF FORM

This leads us to the third and last criterion used for the analysis of the dialogues. A careful analysis of the dialogues of the dyads reveals two principal ways of formulating a text: on the one hand – as we already said – content takes its form at once, without variation or with only minor variation; on the other hand, there can be variation of form without variation of content, or, more precisely, the variation of form gives the content more precision, changes the point of view from which the content is presented or integrates the utterance better into the text. The central aspect to be underlined here is that there are, so to say, degrees of freedom between content and its formulation; the text producer can make a choice in function of different aspects: textual, strategic (negociation) or stylistic to name but the most important ones.

Method of analysis

The variations of content can occur on different linguistic levels and concern

- lexical choice: *plus lourds* → *plus chargés* (more heavy → more loaded);
être accablant – *s'apparenter à une punition* (to be overwhelming → to be similar to a punishment)
- syntactical choice: *entraîne* → *entraînant* (takes of → taking of); *qu'ils gagneraient* → *qui serait gagné* (that they would win → that would be won)

- modalisation (most important for argumentative texts): *individualisé* → *plus individualisé* (*individualized* → *more individualized*)
- aspects related to textual structure: *ainsi* → *en effet* (*in this way* → *in fact*)

To be more precise, one should say that the linguistic form varies without major changes of contents, because in fact, as we will see, every change of form affects necessarily content. That is exactly the reason why no clear defined indicators can be given to separate changes of form *and* content (new contents introduced or contents changed) from changes where content is not affected, or only to a minor degree. We used therefore the following rather vague definition to analyze the differences between the three age groups: how many formal changes are there introduced once the general topic of the first or the last sentence – the ones we analyze in this article – is fixed? The following example is quite typical for a variation of form with minor change of content:

F ils sont nécessaires pour les parents enfin pour que les parents se rendent compte – oui du niveau – (5 sec)

A et puis pour ce que **pour euh réviser en somme ce qui a été fait le matin** – pour

F **pour mettre en pratique ce qui a été appris**

A voilà voilà – (20 sec)

F appris **le matin**

A ah oui je pense que c'est tout

(F they are necessary finally for the parents so that the parents realize – yes the level – (5 sec.)

A and so that so euh to **revise in sum what has been done in the morning** – so

F **to practice what has been learned**

A that's it that's it – (20 sec.)

F learned **in the morning**

A oh yeas I think that's all (Andrée et Frédéric, adultes))

The variation concerns 'revise what has been done in the morning' which is transformed into 'to practice what has been learned in the morning'.

To get a more objective evaluation of the phenomena observed, the dialogues were submitted to two independent judges who evaluated if there was formal change or change of content and who defined the number of formal changes.

Results and discussion

The differences between age groups on this criteria are very important. All adults and fourteen years old produced at least one variation of form, whereas six of the eight dyads of the 10 years old didn't produce any.

It is not possible to give a precise quantitative measure of the number

of variations, because the delimitation of units is very difficult: there is generally no precise mark which indicates when variation begins and when it ends. To give nonetheless an approximation of what happens in the dialogues, one can say that in every dialogue of the adults, there are in average 3 formal variations of the sentence in construction for the first and for the last sentence, whereas the 14 years old produce in average 1 to 2 variations per sentence and the youngest students only 3 all together. Some choices are heavily discussed or justified; very often words or expression are actively looked for. A variation can last 10 or 15 turns or even more before a solution accepted by both parts is found, as shown in the example below:

- C *ouais mais on va mettre autre chose – quand allons-nous – leur permettre – de devenir adulte et d'affronter la vie –*
 D *mais quand c'est pas tellement le problème c'est surtout comment*
 C *ouais quand ça va par rapport à – c'est temporel hein?*
 D *ouais ouais mais*
 C *alors – quand et surtout comment*
 D *mouais*
 C *quand et surtout – comment – allons-nous –*
 D *leur permettre d'affronter ou d'assumer – les – véritables difficultés de la vie –*
 C *véritables – difficultés de – la vie – mais attends moi y a un truc qui manque là dedans c'est qu'ils sont élevés dans du coton –*
 D *non mais on comprend bien –*
 C *ou alors on met alors on les surprotégeant ainsi –*
 D *mais non ils sont pas surprote –*
 C *ben si parce que –*
 D *pas surprotégés c'est c'est –*
 C *alors faut trouver un autre mot mais qui veut dire à peu près la même chose – en les – on peut pas dire couvrir en les – ah ouais attends je sais en les – ménageant –*
 D *ouais éventuellement –*
 C *mais alors en les ménageant ainsi*
 D *mm mh*
 C *en les ménageant ainsi –*
 D *ouais – ça va –*
 C *quand et surtout comment allons-nous leur permettre d'assumer les véritables difficultés de la vie – point final (Claire-Lise et Denis, adultes)*

- (C *yeah but we will put another thing – when will we allow them – to become adults and to face life –*
 D *but when is not so much the problem it's mainly how*
 C *yeah when is in relation to – it's temporal. isn't it?*
 D *yeah yeah but*
 C *so – when and over all how*

- D* myeah
C when and over all – how – will we –
D allow them to face or to assume – the – real difficulties of the life
C real – difficulties of – the life – but wait I there is a thing I miss here
 that they are raised in cotton –
D non but on understands well
C or then we put then in overprotecting them in this way –
D but no they aren't overpro –
C yes they are because
D not overprotected it's it's
C so one has to find another word but which means more ore less the
 same thing – in – one can't say to be overcarful – oh yes wait I know
 in – in treating them gently
D yes perhaps
C but then in treating them gently in this way
D mhm mhm
C in treating them gently
D when and over all how will we allow them to assume the real diffi-
 culties of live – full stop. (Claire-Lise and Denis, adults)

As one can see in this example, there is a formulated idea given from the beginning on. This idea is then clarified on the one hand through new contents being added, on the other hand through variation of form. The new content is the idea of overprotection which is itself transformed into 'couver' (to be overcarful) first and 'ménager' (treat gently) afterwards: variation of lexical choice. The idea of becoming adult and face the life is transformed in several respects: the verb becomes 'assume'; 'become adult' and 'life' becomes 'the real difficulties of life'.

Clearly, formulation is not giving simply the content a form, but a dialectical relationship of mutual precision is taking place between content elaboration and formulation. As Vygotsky puts it: 'Thinking is not expressed in words but realized through words.' (1985, p. 379). This process doesn't take the same form in younger children and in adults.

CONCLUSION

Our analysis of three aspects of the production process of argumentative texts as revealed by the dialogues during collaborative writing in dyads gives our hypotheses credit. Important changes in the way of producing argumentation seem to take place in development. Whereas the 10 years old elaborate content through formulation, at the age of 14, students seem to differentiate more clearly between different processes of text production and to have a certain control over them, namely global planning of the text, elaboration of contents or ideas for the text and formulation of

contents. This tendency is confirmed in the dialogues produced by adults who are able to work on different levels of text production and to produce, in this way, texts which become negotiable, as Golder puts it, or dialogic-linear as Feilke says. Fuller insights in the real dynamic of the production process needs a more thorough analysis of the dynamic itself of the dialogues.

NOTE

¹ I use the terme 'formulation' to designate verbal activities in the dialogues which are related to the different aspects of the linearisation process, i.e. the exteriorised aspects of the linearisation process.

REFERENCES

- Bereiter, C. and M. Scardamalia: 1987, *The Psychology of Written Composition*, Lawrence Erlbaum Associates, Hillsdale, NJ.
- Bouchard, R.: 1992, *Processus Rédactionnels et Interaction*, Université Lumière – Lyon 2, Thèse d'habilitation.
- Camps, A.: 1992, 'Algunas Observaciones Sobre la Capacidad de Revisión de los Adolescentes', *Infancia y Aprendizaje* 58, 65–81.
- Daiute, C. and B. Dalton: 1992, *Collaboration Between Children Learning to Write: Can Novices be Masters?* Technical Report, No. 60. Center for the Study of Writing, Berkeley and Pittsburgh.
- Dausendschön-Gay, U., E. Gülich and U. Kraft: 1989, 'Gemeinsam Schreiben. Konversationelle Schreibinteraktionen Zwischen Deutschen und Französischen Gesprächspartnern', in G. Antos and H. P. Krings (eds.), *Textproduktion*, Niemeyer, Tübingen.
- Feilke, H.: 1988, 'Ordnung und Unordnung in Argumentativen Texten. Zur Entwicklung der Fähigkeit, Texte zu, Strukturieren', *Der Deutschunterricht* 40(3), 65–81.
- Feilke, H.: 1989, 'Some Aspects of Writing Development', in P. Boscolo (ed.), *Writing: Trends in European Research*, UPSEL Editore, Padova, 91–102.
- Foulin, J.-N., M. Fayol and L. Chanquoy: 1989, 'On the Temporal Management of Writing by Adults', in P. Boscolo (ed.), *Writing: Trends in European Research*, UPSAL, Padova, 227–238.
- Golder, C.: 1991, 'Argumenter: de la Justification à la Négociation', *Archives de Psychologie* 60, 3–24.
- Golder, C.: 1992, 'Justification et Négociation en Situation Monogérée et Polygérée dans les Discours Argumentatifs', *Enfance* 46, 99–112.
- Hayes, J. R. and L. Flower: 1980, Identifying the Organization of Writing Processes, in L. W. Gregg and E. R. Steinberg (eds.), *Cognitive Processes in Writing*, Erlbaum, Hillsdale, 3–30.
- Karmiloff-Smith, A.: 1979, 'Language Development after Five', in P. Fletchers and M. Garman (eds.), *Studies in Language Acquisition*, Cambridge University Press, New York.
- Levelt, W. J. M.: 1989, *Speaking: From Intention to Articulation*, M.I.T. Press, Cambridge MA.
- Matsuhashi, A.: 1981, 'Pausing and Planning: The Tempo of Written Discourse Production', *Research in the Teaching of English* 15, 113–134.

- Scardamalia, M., C. Bereiter and R. Steinbach: 1984, 'Teachability of the Reflective Process in Written Composition', *Cognitive Science* 8, 173–190.
- Schneuwly, B.: 1988, *Le Langage Écrit chez l'Enfant, La Production des Texts Informatifs et Argumentatifs*, Delachaux et Niestlé, Neuchâtel et Paris.
- Vygotsky, L. S.: 1985, *Pensée et Langage*, Editions Sociales, Paris.