

The writing processes of an EFL writer : a case study

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Introduction

Following a shift of emphasis in recent writing research from product to process, a number of studies have investigated ESL/EFL writing processes. This article reports one such exploratory study of the composing processes of a postgraduate EFL writer as she thought aloud while producing an essay in English.

Theoretical Background

The challenges to linear stage conceptions of writing have led to advances in knowledge of composing. Composing is viewed as a thinking problem and is seen as a cognitive process. Research in the 1970s and 1980s focused on the mental states of writers, their problem solving strategies, decisions about audience, language use and composing processes. In first language writing one of the pioneering works, which shifted the emphasis from product to process and used think-aloud protocols of high school student writers as data, was carried out by Emig (1971). The main concern for writing teachers, she argued, should be composing processes rather than texts.

Writing as a Problem-Solving Activity

Another important work which contributed in this area is that of two of the most well-known case-study researchers Flower and Hayes (1980; 1981), whose think-aloud protocol based studies of writers' composing processes has been quite influential. Flower and Hayes identify composing as a complex problem-solving activity, responding to a rhetorical situation in the

form of a text (Figure 1). Their work, which uses a cognitive process model, represents the internal process of the writer's mind and looks at composing as a complex problem-solving activity. This model seems to serve as a frame for working out more detailed and possibly more controversial accounts of how the mind copes with the constraints of writing (Scardamalia and Bereiter, 1986).

Writing as a Recursive Process

Subsequent researchers of written composition have supported Flower and Hayes' cognitive process model of writing (Figure 1). Their theory has shown that writing consists of the processes of *planning*, *translating*, and *reviewing*. Far from occurring in a linear sequence, the processes alternate continuously with each other.

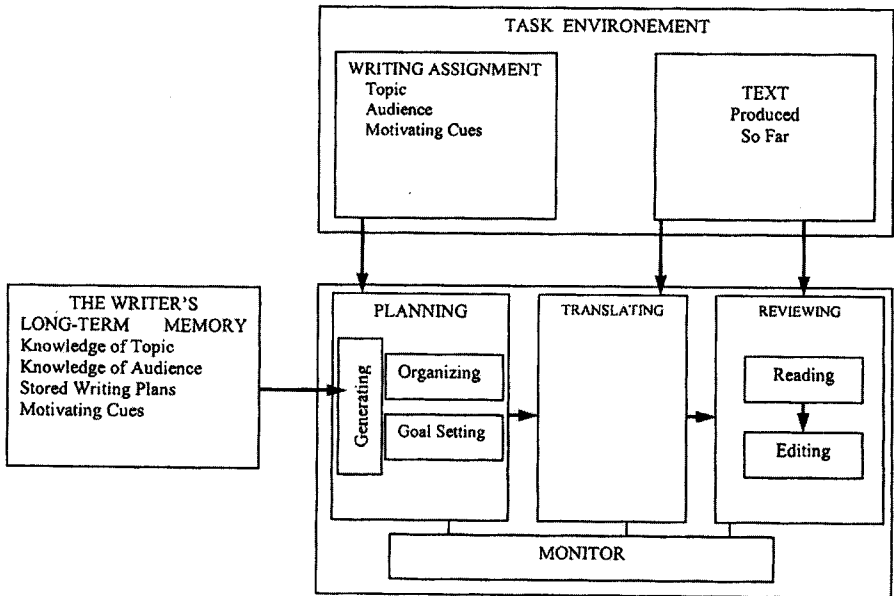


Figure 1. The Cognitive Model of the Composing Processes

Source: Flower, L. S. and J.R. Hayes, "Identifying the Organization of Writing Processes," In L. W. Gregg and E. R. Steinberg (Eds.), *Cognitive Process in Writing* NJ: Lawrence Erlbaum Associates, 1980 (3-30).

Planning is generating content, organizing it, and setting up goals and procedures for writing.

Transcribing (figure 2) is used in the study to refer to what Flower and Hayes (1980; 1981) call *translating*, which is the process of putting ideas into “visible language” (Flower and Hayes, 1980: 373). To avoid ambiguity, the study has kept the term ‘translating’ to refer to the transfer from one language to another since translating usually has this meaning in interlanguage studies.

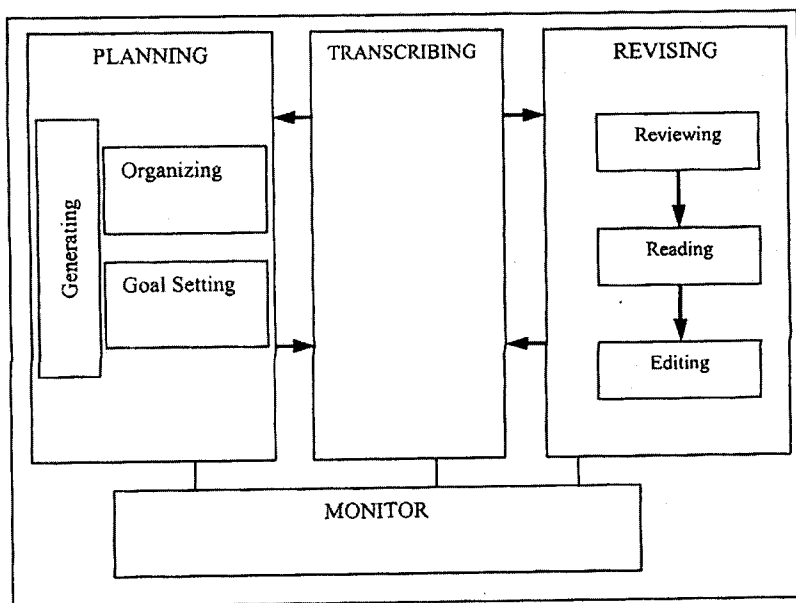


Figure 2. Our model of the Cognitive Processes.
 Adapted from Flower and Hayes (1980; 1981)

Thus, transcribing or the act of expressing the content of planning in written language often requires the writer to develop, clarify, and revise meaning. For that reason, transcribing often sends the writer back to planning.

Reviewing is the act of evaluating either what has been written or what has been planned. When the evaluation of a text or a plan is negative, reviewing often leads to revision.

The Current Study

The current study was originally constructed to examine code switching between languages. The experiment was concerned with trying to grasp the nature of code switching processes in EFL. The verbal protocol technique was effective for this purpose and was later extended to focus on composing processes. It was only later that we focused our attention on specific EFL (L3) composing behaviors. The protocol-based study did not intend to provide a complete picture of the EFL writer since it was based on one participant; rather, it was designed to provide as much as possible, the writing behaviors of an advanced EFL student-writer and to enable one to understand how she composed a piece of academic writing.

The Methodology

The study used a case-study approach supported by think-aloud protocol analysis as the research technique. The think-aloud technique was selected because, despite being somewhat artificial, it seemed to be the most appropriate research tool to access the area of interest, i.e. the writing processes. In think-aloud protocol, we asked the subject to record her thoughts as they arose into a tape recorder as she wrote. The tape was later transcribed (see complete protocol in appendix), and features which patterned the behaviors of the writer were focused on. The resulting audio tapes were collected and transcribed. For ease of readability, in the protocol transcription we used the following features:

- Everything said aloud and written at the same time is underlined: e.g. habit-formation theory
- Everything said in French is transcribed verbatim in French in red script colour: e.g. Bon. Le plan d'abord. Oui il y a deux parties dans la question. Alors .. umm ..
- Everything said in Arabic is transcribed in blue script colour: e.g. **mech** (dialectal Arabic to express negative evaluation)
- Deleted items are crossed out: e.g. ~~the learner~~ , ~~individual~~
- Pauses (..)
- Hesitation : e.g. (eh..., umm...)

The Writing Task

The two hour task required specialist content knowledge and the student was expected to draw upon her previous reading. The prompt “*Some linguists regard language to be an innate phenomenon, rather than merely a habit formation. Comment on this view and show to what extent this view has influenced language teaching practices*, which the student was familiar with from her specialised postgraduate programme, was taken from previous writing assignments since research (Perl, 1979) has suggested that the greater degree of commitment felt by the writer, the more successful the writing is likely to be.

The Findings

The participant carried out the process in English (L3), but switched to French (L2). She used French extensively throughout the process, especially while she planned in advance what ideas she was going to develop and how she was going to organise them in the essay. Here are some examples:

- Bon. Le plan d’abord.
- Oui il y a deux parties dans la question. Alors .. umm .. je dois faire attention je dois bien présenter les arguments ..
- Comment je vais présenter tout ça? Je peux pas parler ... eh ... comment dire .. vaguement de ces theories. C’est une emergence .. Donc .. je vais dire...
- Bon j’ai cité Chomsky pour illustrer innateness theory .. pour eh ... *habit-formation theory* .. c’est évident je dois citer Skinner .. B. F. Skinner. Voilà .. Cette theorie qu’est-ce qu’elle dit? Comment je peux expliquer ça?
- The more the learner is exposed .. the learner ? why the learner? je dois faire attention .. on doit parler tout simplement de ...
- Voilà on a la thèse ici .. l’hypothèse de B.F. Skinner .. B.F. Skinner qui a été critiqué par Chomsky.

The writer’s use of French and English during the planning process can be summarized as follows. Except for reading the draft, and for brief statements to indicate her thoughts, the writer planned in French. Examination of the planning segments of the protocol reveals no English segments that express the generation or organization of ideas. Neither are there any English segments that reflect the goal-setting process. Translation whether from French to English, or from English to French, played a minimal role during planning.

Planning in French required our writer to review her plans in French much of the time. That is, she had to translate her plans to French in order to review before she transcribed:

- We have two parts in the question. Oui il y a deux parties dans la question.
- Oui il y a deux parties dans la question. Alors .. umm .. je dois faire attention je dois bien présenter les arguments ..
- I should be clear. je dois faire attention .. umm .. je dois bien présenter les arguments .. Dans mon commentaire donc je dois faire sortir ça avec des exemples de .. des exemples .. des pratiques à l'école. That is ... how schools ... non .. non how languages are taught in schools.
- Ces théories elles ont été .. umm .. elles ont émergé oui .. oui .. Voilà .. eh... c'est une émergence .. Donc .. je vais dire .. *These theories have emerged* .. have come .. emerged ? come out *from observations that linguists have done* .. have done .. *have made*.
- Cette théorie qu'est-ce qu'elle dit? Comment je peux expliquer ça? *This hypothesis says that the more the learner is exposed*
- innate c'est le mot clef ici. Chomsky he has made a dichotomy. Bien sûr il a tranché... pour lui il ne s'agit pas d'apprentissage .. c'est une acquisition .. voilà .. to acquire and to learn.
- Yes .. asked how can a child produce or create correct sentences he never heard before. To create .. créer? produire? to build up his own sentences.
- Le mot create .. generate .. voilà .. eh... generate voilà le mot que je cherchais. Generate c'est le terme de Chomsky. Jusque là je suis dans la première partie du sujet. Dans la deuxième partie on doit parler de l'application de ces théories dans le milieu scolaire.
- *So at school the teacher the teacher is going to have the role of the mother.*
- Qu'est-ce qu'elle va faire l'enseignante? C'est ça qu'on doit développer. L'enseignante? The teacher of L2? qu'est-ce qu'elle va faire ? The teacher of L2 is going .. Eh... eh...
- *in the conclusion* qu'est-ce qu'on va mettre dans la conclusion?
- *The two theories contribute to learning a language.* elles sont complémentaires

If transcribing in the native language is a complex process, it is more complex in a foreign language. While transcribing, the EFL writer leaned heavily on the use of L2 and translation. In addition, when she rehearsed or wrote in English, she often translated to check her thoughts:

- the scope of interest of many linguists who .. who differently .. non .. c'est pas correct who plutôt who hold *hold differently* who hold differently *insights* voilà .. to the nature
- why the learner? Non je dois faire attention .. pas.. learner .. the individual .. voilà c'est plus général
- Non pas learning .. acquiring? Acquiring and learning .. c'est là où réside la différence justement.
- Dans mon commentaire donc je dois faire sortir ça avec des exemples de... des exemples .. des pratiques à l'école. That is... how schools ... non .. non how languages are taught in schools.
- Comment je vais présenter tout ça? Je peux pas parler ... eh ... comment dire ... vaguement de ces théories. Non **mech** vaguement .. c'est pas le mot. Dans l'absolu? Ces théories elles ont été ... elles ont émergé .. oui .. oui .. Voilà ... c'est une émergence .. Donc .. je vais dire .. *These theories have emerged*

Much of the writer's rehearsal was done in French. English was rarely used for the expression of ideas as they were generated and organized in French, nor were French statements always translated into English. During *transcribing*, the writer evidently used English. Although the sentences in which ideas were given form were rehearsed in either French or English, they were written in English. The writer was able to rehearse sentences equally efficiently in French and in English, showing less repetition in L2 than in English.

The *revising* process involves reading and reviewing. This process is thoroughly recursive in that reading leads to evaluating and editing. Furthermore, revising frequently calls for more planning and transcribing; this in turn calls for reviewing. Our writer reviewed aloud what was planned and generated, at times to evaluate it, but at other times to capture the content and structure of the text produced up to the point at which the review occurs. She seemed to review by translating to French what she was going to transcribe. Translating to French as she rehearses allows her to evaluate the fit between her intention and her words in a way that satisfies her better

than does rehearsing only in English. Thus, she frequently rehearsed in French, she translated to English, rehearsed in English, including repetition, and spoke in English while transcribing. While reviewing, the writer produced no reading in English. The reasons for the greater number of English segments are clearly related to the nature of the reviewing process she carried out during planning rather than during and/or after transcribing. Although the writer translated to French at times while rehearsing what she was going to write, she also rehearsed in English. While revising, although she often used French to express her assessment of what she had written or planned, she used English to rehearse the portions of the text to be transcribed, and spoke in English as she wrote.

- oui .. oui
- non .. non
- non **mech** vaguement .. c'est pas le mot
- oui .. oui .. voilà
- non c'est pas correct .. plutôt .. voilà ..
- Non pas learning .. acquiring? c'est là où réside la différence justement.
- Voilà .. why the learner? Non je dois faire attention .. pas.. learner .. the individual .. voilà c'est plus general .. *the individual* of any age.
- Non .. we speak about L1 donc ce n'est ni ~~the learner~~ ni ~~individual~~ Voilà très bien ..
- non **mech learner** on a dit
- non **mech** sentences.. non Chomsky lui utilise sentences je crois .. créer? produire? Le mot create .. suis pas sûre .. voilà .. generate .. voilà le mot que je cherchais.
- Foreign language or second language? C'est pas clair. Bon ça fait rien.. mais y a une différence .. je laisse L2 comme la question.
- Voilà .. eh... je crois qu'j'ai mis l'essentiel.

Because the writer was verbalizing partially her thoughts in English, she was not hampered by questions of translation as she wrote. The French segments represent in each case, finding the English equivalent of a French word. For example, while trying to produce *emerged* from *émergence*, *create*, *generate* from .. *créer*, *produire*, etc.

Although the writer typically used French to express her assessment of her writing during the reviewing process, she produced only two segments in L1 (Arabic) for a negative assessment of what she had written: '**mech learner**' for *not learner*, '**mech sentences**' for *not sentences*.

Overall, the planning, transcribing, and revising processes of the EFL writer in this study strongly resemble the first language writing process. The main differences are the use of the second language and translation in the planning, transcribing, and revising processes.

Discussion

The findings suggest that use of French (L2) in thinking processes underlying English (L3) composing may be caused by factors relating to high-level knowledge demands. The factors that may potentially influence French use, as identified in this study, could be a need to (i) generate a thought; (ii) a need to facilitate the development of a thought; (iii) a need to verify linguistic choices. These factors may be so powerful that language-switching and translation could take place as if the process were enacted systematically.

The data suggest that language-switching in addition to the use of English makes it possible for a thought to be developed cross-linguistically without slowing down the pace of thinking. It also compensates for the possible failure to produce efficiently a full output in English only. In other words, use of French enabled an initiated thought to continue to develop and helped generate content which the writer sometimes felt less competent to produce when she used English only. This phenomenon suggests that generating and developing a thought in English at a normal speed would also be cognitively demanding. In all verbalization French played a major role in the writer's process as if to keep the composing process flowing smoothly. Not only did it play a role in terms of number of occurrences, but also in terms of effect on the overall process. Although the EFL writer code-switched language while moving back and forth between planning, transcribing, and revising, and translated, she was able to keep her plan in mind while writing. Throughout the composing process, planning was carried out in both English and French with recourse to rehearsal in French or to translation. Planning and rehearsing in French makes translation from French to English an essential sub-process of the transcribing process. French use appeared to play a role in the manner in which the composing process was carried out, in that reliance on it as the medium for verbalizing content during planning did not seem to restrict the generation and development of ideas. Rather, while composing, the writer translated ideas back and forth from French to English as words called up new ideas, and she translated thoughts back and forth as she rehearsed, wrote, and revised. Translation appeared to be a way of transferring meaning from one language to the other and a mediating process

that allowed the writer to check her intended meaning with her plans or the written form she had given that meaning.

When composing in English, in addition to the complex writing processes, the EFL writer uses code-switching and translation. Translation appeared to play a major process in the foreign language composing process, though the EFL subject code-switched languages. The writer’s extensive verbalization of thoughts in French did not seem to restrict generation and development of thoughts to English only. The extensive use of French during English composing process, particularly during the planning and transcribing process did not create problems related to the writer’s inability to translate units planned or rehearsed in French. Even when the writer did not use French overtly, she used it at points when she, although apparently thinking and transcribing in English, interrupted writing what to say and how to say it in English. It was as if French was available, as a stand-by resource, ready to step into the process whenever English weakened. The availability of French indicates the possibility that some kind of codeswitching and translation inter-process was taking place recursively even when the EFL writer was writing aloud in English. It does not seem that the French interferes with English, but like a backstage prompter, can be heard when the actor falters in his line for the co-dependent nature of two languages and writing interacting within the subject composing process (see figure 3 below).

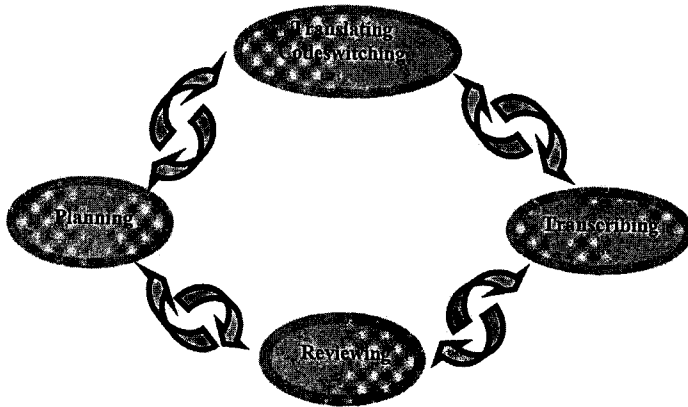


Figure 3. The Writing Process of an EFL Writer

The process of rehearsing in French and translating it into English appears, on the analysis of the protocol an efficient manner of composing in English. After retrieving or developing an idea in French, for instance, the writer would rehearse it, translate it into English, and then go on to repeat the process of generation, rehearsal, and translation. Although tentative, the conclusion that can be drawn from the present limited study, that the advanced EFL writer does not need to be able to talk out all their thoughts in English in order to develop them fully. The role of French in the English composing process must be defined in terms of the specific subprocesses in which it is engaged. In planning, for instance, French could be the source of facts and information as well as an evaluative medium for the expression of ideas and goals as they develop. Flower and Hayes (1984:129), in setting forth a theory of "multiple representations" of meaning during planning, stated that "writers at work represent their current meaning to themselves in a variety of symbolic ways" which can be arranged on a scale "based on the increasing amount of linguistic information each representation contains of formal prose" (130).

The role of French in the composing process of this EFL writer was that of primary source of content and alternate medium for the verbal expression of thought. Smith (1982) stated that thought is "essentially non-verbal" (65), with the possible exceptions of verbal memory and inner speech, "the language we hear when we talk (silently) to ourselves" (39). French could therefore be seen as playing a powerful role as the source of information in the EFL composing process, whether the writer verbalized her thought in English or in French. French was probably the language of the writer's inner speech, for she used it during most of the composing process, thus giving it an even stronger role in the process.

Implications for EFL Composition Teaching

Analysis of the data gathered in this study showed that the EFL composing process carried out by the writer resembled the L1 process in terms of the nature, function, and organization of the composing processes. The difference between L1 and EFL (L3) composing processes stems from the ability of the EFL writer to use two languages while composing. The features which particularly patterned the EFL advanced writer consisted of the use of L2 rather than L1, and translation in planning, transcribing, and revising. Reliance on French during planning and transcribing went systematically

through language-switching and translation. It may reasonably be assumed that French is never completely absent from the mind of EFL students in Algeria, who unavoidably make use of it in the composing process. In order for Algerian EFL teachers of writing to guide students toward effective use of the languages they possess, identification of students who use French extensively during the writing process is necessary. The different ways in which they use each language – French and English - must be considered, as must their reasons for using French, in particular, when one reason is their concern for correctness. Teachers should exploit the advantageous use of French and English. Call on French is indeed advantageous when used as a strategy to overcome writing problems, generate ideas, find an English word through its French equivalent, or check grammar or meaning. EFL writing teachers should therefore draw the students' attention to the advantages of having two languages at their disposal, and should teach the efficient use of the second language - French - as a facilitating strategy for generating and developing ideas.

Generally speaking, however, extensive use of French does not always facilitate the overall writing process. Therefore, EFL students need to be both taught and encouraged to develop their thoughts in English, the language in which they write. The ability to verbalize thoughts in English, the foreign language, can be taught in a number of ways, including debate and group discussions and collaborative writing since they require students to speak to each other and to the teacher as they generate ideas, organize them, set goals, transcribe, and review, to avoid as far as possible the problems inherent to translation. The examples in the previous sections demonstrate that French language use facilitates rather than inhibits English composing processes. The effectiveness of language-switching provides important evidence supporting the notion that conceptual knowledge is shared across L2 and L3 and may be accessed cross-linguistically without the risk of affecting quality at a conceptual processing level.

Conclusion

Although the results raise several issues, the most significant is the influence of L2 rather than L1 on cognitive processes involved in EFL writing. Reduction of the complexity of transcribing in English may occur as the writer gains more proficiency in verbalizing their thoughts in English and the role of conscious translation diminishes. One limitation of the study

is its narrow focus on one participant and one task, as a result of which the findings cannot be generalised. It is thus necessary to conduct research involving more participants across the levels of English proficiency and courses to gain a deeper insight into the EFL writing processes and the role of the languages which students possess.

Appendix

Some linguists... Bon some linguists regard language to be an innate phenomenon, rather than a habit formation eh... eh... Bon. Le plan d'abord. We have two parts in the question. Oui il y a deux parties dans la question. Alors... the first part deals with two views, that is to say innate innateness theory and habit formation theory. Innateness and habit formation. I should be clear. je dois faire attention... two key words innateness and habit formation. Innate phenomenon .. it means to be born with that is to say .. from the birth the individuals are born with such a capacity of learning. Eh... eh... the second part oui .. oui .. comment on this view and show .. show.. je dois bien présenter les arguments ... le mot 'comment' est important ici. 'Comment' .. yes ... the second part I must show how... how these theories have changed language teaching methodologies. Comment and show .. Dans mon commentaire donc je dois faire sortir ça avec des exemples de... des exemples .. des pratiques à l'école. That is... how schools ... non .. non how languages are taught in schools. Comment je vais présenter tout ça? Je peux pas parler ... eh ... comment dire ... vaguement de ces théories. Non **mech** vaguement .. c'est pas le mot. Dans l'absolu? Ces théories elles ont été ... elles ont émergé oui .. oui .. Voilà ... c'est une émergence . Donc .. je vais dire .. *These theories have emerged* .. have come .. emerged? come out *from observations that linguists* have done .. have done .. *have made*. The introduction... *Learning learning a language has been has always been* eh... eh... *the scope of many linguists the scope of interest of many linguists who differently* yes... many linguists who differently *hold in- insights insights to to the nature to the nature* .. the scope of interest of many linguists who .. who differently .. non c'est pas correct who plutôt who *hold hold differently* who hold differently insights voilà .. to the nature *and* and... *as well as the procedure that any* .. speaker *individual speaker* um... um... undergoes .. undergoes .. yes .. *undergoes while learning a language*. Non pas learning .. acquiring? Acquiring and learning .. c'est là où réside la différence justement. Of course with *innateness we have to appeal to*

Chomsky .. *Noam Chomsky* Noam Chomsky because he is the one who has assigned that and claimed and made the claim about this capacity that babies are born with um... um.... Contrary to that there was the habit formation view. Bon j'ai cité Chomsky pour illustrer innateness theory .. pour eh ... *habit-formation theory* .. c'est évident je dois citer Skinner .. B. F. Skinner. Voilà .. *with B.F. Skinner* who say .. *who says social agents are responsible for the transmission of linguistic behaviour .. the verbal linguistic behaviour to the child.* Eh... eh... yes... the stimulus-response hypothesis. Cette théorie qu'est-ce qu'elle dit? Comment je peux expliquer ça? *This hypothesis says that the more the learner is exposed .. the learner ? why the learner?* Non je dois faire attention .. pas.. learner .. the individual .. voilà c'est plus general .. *the individual* of any age. Non .. we speak about L1 .. donc ce n'est ni ~~the learner~~ ni ~~individual~~, .. on doit parler tout simplement de .. child .. yes .. the child .. *the more the child is exposed to his environment, the easier the learning of the language will be.* Voilà très bien .. *the learning is mechanical.* Voilà on la thèse ici .. l'hypothèse de B.F. Skinner .. B.F. Skinner qui a été critiqué par Chomsky. If the point of view of Skinner is the thesis the antithesis will be eh... will be on est obligé .. it is Chomsky's view. *Chomsky rejected the environment theory of Skinner. For Chomky the learner non mech learner* on a dit *the child has .. is endowed capacities to learn .. learn non .. là encore on a dit acquire .. acquire language because they are born with innate capacities .. innate* c'est le mot clef ici. Chomsky he has made a dichotomy. Bien sûr il a tranché... pour lui il ne s'agit pas d'apprentissage.. c'est une acquisition .. voilà .. to acquire and to learn. *Chomsky says children produce sentences .. sentences ? Non mech sentences .. là aussi je dois éviter ce terme; c'est utterances .. y a une différence .. sentences or utterances ? non Chomsky lui utilise sentences je crois. Yes asked how can a child produce or create correct sentences he never heard before. To create .. créer? produire? to build up his own sentences. Le mot create .. suis pas sûre .. Chomsky asked how a child generates sentences he never heard before. Generate voilà generate voilà le mot que je cherchais. Generate .. c'est le terme de Chomsky. Jusque là je suis dans la première partie du sujet. Dans la deuxième partie on doit parler de l'application de ces théories dans le milieu scolaire ? *So at school the teacher the teacher is going to have the role of the mother.* Qu'est-ce qu'elle va faire l'enseignante? C'est ça qu'on doit développer. L'enseignante ? The teacher of L2? Qu'est-ce qu'elle va faire? The teacher of L2 is going .. Ah... attention. Est-ce que je dois préciser L2 and foreign language? Y a une*

différence. Attends .. it's L2 in the topic. Foreign language or second language? C'est pas clair. Bon ça fait rien .. mais y a une différence .. from the point of view of sociolinguistics. *What the teacher does in the classroom is important for language learning. The two theories have been applied in L2 ... je laisse L2 comme la question. The L2 teacher follows the steps used by the child's mother during the learning of first language or mother tongue. Eh... eh... in the conclusion .. Qu'est-ce qu'on va mettre dans la conclusion? The two theories contribute to learning a language .. elles sont complémentaires .. the social environment and innate capacity .. they are complementary to learning an L2. Voilà je crois qu'j'ai mis l'essentiel.*

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