7 Conclusions

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7.1 Introduction

At this point¹, and in spite of our continuous efforts to trace a path through the jungle of detailed findings, the reader may feel hopelessly lost in the undergrowth of small observations and comments. But reality is deplorably complex, and any scientific endeavour worth that name has to respect this fact before turning to what it is eventually aiming at - the general principles which rule the vexing luxuriance of facts. In our case, these principles are supposed to constitute a two-fold systematicity. In the introduction to this study, we said (p. 1):

"We assume that both

- the internal organisation of a learner variety at a given time, and
- the transition of one variety to the next over time

are essentially systematic in nature. Neither of these assumptions is trivial. Moreover, neither of them precludes a certain amount of randomness and unexplained, perhaps unexplainable variation. But we are only interested in the phenomena under investigation to the extent to which they are systematic and based on recognisable principles, and we assume that this extent is high."

It was further said that, under this view, fully-fledged languages are based on the same organisational principles. They are, so to speak, nothing but ultimate learner varieties which the learner stops elaborating at the point where there are no perceivable differences from the language of his social environment. So far for the perspective. What did we find? The main results can be summed up in five points:

- (a) We regularly observe a transition from "nominal utterance organisation" (NUO) to "infinite utterance organisation" (IUO), and from there to "finite utterance organisation" (FUO). In NUO, utterances are extremely simple and mainly consist of seemingly unconnected nouns, adverbs and particles (sometimes also adjectives and participles). What is largely missing in NUO, is the structuring power of verbs - such as argument structure, case role assignment, etc. (hence, "pre-verbal utterance organisation" might be a better term). This is different in IUO: The presence of verbs allows the learner to make use of the different types of valency which comes with the (non-finite) verb; it allows, for example, a ranking of the actants of the verbs along dimensions such as agentivity, and the assigning of positions according to this ranking. At this level, no distinction is made between the finite and non-finite component of the verb; such a distinction, which is of fundamental importance in all languages involved in this study, is only made at the level of FUO, which is not attained by all our learners. Transition from NUO to IUO and from there to FUO is slow and gradual, and the coexistence of several types of utterance organisation as well as backsliding is not uncommon.
- (b) Three types of constraints are operative on all levels of proficiency: pragmatic, semantic, and phrasal; but their interaction and their relative weight vary considerably. We found two types of pragmatic constraint. The first one is of primordial importance in the overall organisation of utterances:

P. Focus last.

The second type concerns the whole mechanism of introducing and maintaining information ("referential movement"). It affects the form of noun phrases, but also positional restrictions on noun phrases (and adverbials). Semantic constraints have to do with the case role (or "thematic role") of the various actants. Essentially, we observed one such constraint based on the control asymmetry between actants:

S. Controller first.

or more explicitly "The NP-referent with highest degree of control comes first" (p. 51), where the control asymmetry "reflects the degree of control to which one referent is in control of, or intends to be in control of, the other referents" (p. 51). Depending on the particular verb, the control asymmetry may be weak or even absent (as in the case of copula constructions). In this case, the effect of this factor diminishes or even disappears. On the other

hand, there may be verbs whose lexical content involves two different states in which the control asymmetry varies, as in *John gave the book to Mary*. In the "source state", John is in control of the book, and active in bringing about a "target state", in which Mary is in control of the book. In cases of this type, the simple principle "Controller first" needs refinement.

Phrasal constraints are those which can be stated in terms of categories such as "finite verb", "noun", etc.; for example " V_{fin} always final", "preposition after noun". They seem to play a minor role in the overall organisation of utterances, but are important within smaller phrases.

It is the interaction of these constraints which determines the concrete shape of an utterance. This interaction changes. If, for example, prepositions are absent, then phrasal constraints like "preposition after noun" cannot apply. If there are no lexical verbs, then the control asymmetry cannot be operative. If the distinction between V_{fin} and V_{inf} is not made, then a rule such as (TLs German and Dutch) "one major constituent before V_{fin} in main declarative clauses" cannot be obeyed, and P. and S. reign unchallenged. This is the background of the development from NUO to IUO and finally to FUO. But even if all types of constraints are operative, their relative weight can differ. This becomes clear in cases of competition; for example, where the controller is in focus. Conflicts of this kind are not only a major germ of development; they are also responsible for many of the complexities of fully-fledged languages, which provide us with devices to solve these conflicts (such as, for example, cleft constructions, dislocations, etc.).

(c) The development of NP structure is closely related to its function in introducing and maintaining referents (persons or objects). The basic dichotomy is between

lexical noun (alternatively name or deictic pronoun, but not anaphoric pronoun), if the referent is introduced,

vs.

zero anaphor, if the referent is maintained from the immediately preceding clause and neither its topic-focus-status nor its case role ("controller") is changed.

There are a number of possibilities which fall between these two extremes of introduction and maintenance. For example, a referent may be maintained,

but not from the immediately preceding utterance; or it may be maintained, but it was in focus in the first utterance, and now moves to topic. Learners develop various devices to deal with these specific conditions, in particular anaphoric pronouns and the definite/indefinite distinction. But this process is not fully uniform; its course depends on how these cases are dealt with in both source and target language, as well as on highly idiosyncratic constraints.

- (d) We did not systematically look at the development of adverbials, negation and (other) scope particles. It was often noted, however, that the topic-focus-structure plays a major role in their placement. Space and time adverbials, for example, regularly show up in initial or final position, depending on whether they belong to the topic or to the focus. Furthermore, the transition point between topic and focus component plays a major role. It is not only the preferred place for negation. Some learners even seem to develop special devices to mark this transition point (cf. chapters 3.3, 5.3 and 6.6). Given these observations, we might even speculate that the normal position of the finite component in Dutch, German and English is a fossilised topic-focus-boundary.
- (e) Not all learners attain the level of "finite utterance organisation", and only some come close to mastering it. But they all reach IUO, and up to that point, their development is remarkably similar (albeit not absolutely identical). They develop something like a "basic learner variety" (to be discussed below), and only in the subsequent elaboration of this basic learner variety do strong influences of the source language as well as of the pecularities of the target language become visible. In other words: The initial steps in development are dominantly guided by universal principles, and factors attributable to the specifics of individual languages are more characteristic of later stages.

We think this is a correct picture of what we found. It should be clear, though, that in spite of the relative wealth of data studied here, there are many lacunae, on the one hand, and some unexplainable, if not contradictory observations, on the other. But given the many factors which might exert some influence on this complex process of language acquisition, we believe that the emerging picture is quite straightforward and consistent. In the following section, we shall have a closer look at three key notions of this picture and their interrelation - the topic-focus distinction, the control asymmetry, and the finite-non-finite distinction of

the verb. In section 7.3, we will briefly discuss the properties of the "basic learner variety" and in 7.4, the reasons why development need not stop at this point.

7.2 Focus last, Controller first, and the finite-nonfinite distinction

7.2.1 Topic-focus, quaestio, and the interrelation between text and utterance

Various notions of topic and focus are found in the literature, and it will be helpful to repeat how they are understood here (for a more detailed treatment, see Klein and von Stutterheim 1987; von Stutterheim and Klein 1989). An utterance such as

- (1) John went to York yesterday.
- can answer different questions (though with different intonation), for example
 - (2) What happened?
 - (3) What did John do yesterday
 - (4) Who went to York yesterday?
 - (5) Where did John go yesterday?

In all of these cases, (1) settles a set of alternative possibilities raised by the question. After (2), the alternative is between the various things that could have happened (at some contextually relevant occasion). After (3), the alternative is slightly narrowed down: It is not between the events that could have happened, but between the things which John could have done yesterday, and the answer states the one which he really did do, namely go to York. After (4), the alternative is still more specific: It is the set of people who could have gone to York yesterday, and (1) selects and specifies one of them, namely John. And after (5), the alternative is between the various destinations to which John could have gone yesterday, and again, (1) selects and specifies one of them, namely York.

Such a set of alternative possibilities will be called the **topic** of an utterance, and the one which is selected and specified, the **focus** of the utterance. Recall that these notions refer to parts of the meaning of an utterance, not to the expressions which encode these meanings (for example a constituent or a series of constituents). After (4), for example, the focus is the person John, which is also expressed by the word "John". But under different contextual conditions, the same focus could also be expressed by the word "he" or by "that man". So, we must distinguish between focus and focus expression, and similarly between topic and topic expression. In a question-answer-pair, as in the example, the topic is first expressed by the question, and then by part of the answer, for example by

"went to York yesterday" after (4), and by "John went ... yesterday" after (5). In this case, the topic is maintained; but this need not be the case, since not all statements must be preceded by an explicit question. In general, the distinction between topic and focus must not be confused with the one between "given" or "maintained" on the one hand, and "new" or "introduced", on the other, although these dichotomies often coincide. Compare, for example, a sequence like

(5) Who won the final, Peter or Mary? - She won the final.

In this case, the alternative is between the people who could have won, and this alternative is narrowed down already to Peter and Mary. The focus of the answer is Mary. But obviously, Mary is maintained, just as everything else in the answer. So, the focus expression of the answer is (stressed) "she", and the topic expression is "won the final".

Languages provide us with different devices to mark that some expression contributes to the topic or to the focus, the most important of which are word order, intonation, and sometimes special particles (Japanese is a well-known case for the latter possibility). The constraint

P. Focus last

which we observed throughout our learner varieties, is such a marking. It means that the constituent(s) which express(es) the focus comes last in the utterance. It should be very clear that this constraint can easily overruled by other factors, as we have repeatedly seen. The fact that, as in some of the examples above, the focus expression shows up in inital position, does not falsify the constraint, just as a flying bird does not falsify the law of gravity: There are other forces, too, which may pull in a different direction.

As has already been stated, topic-focus-structure is not bound to the existence of an explicit question (although questions are a prime device to establish the topic-focus-structure of the answer). In our data, most utterances belong to connected text, and this fact influences the structure of the individual utterances in various ways. Since this is of both methodological and theoretical importance, we will have to say a word about the interrelation of text structure and the structure of individual utterances. This is best done by an example. Suppose you happen to have observed a bank-robbery about which you are asked in court. Then, the judge's question may be: "What did the bank robber look like?" This question fixes to a high degree what you have to say: You are asked to specify a number of visual properties of some person. Hence, you cannot reasonably answer this question by describing an action. In other words: The topic of the

answer is the set of visual properties which the bank robber might have had, and the answer has to select and specify one or some of them. Therefore, you may answer this question, for example, by

- (7) Like Charlie Chaplin.
- (8) He looked like Charlie Chaplin.

In both cases, the adverbial "like Charlie Chaplin" clusters a number of visual properties (under the assumption that the listener knows what Charlie Chaplin looks like). You may also choose to answer the judge's question by a complete text, such as

(9) Well, I could only see through this small window. He was about six feet tall, with dark hair. He was wearing a Parka, I think. I couldn't see his face first. But then, this lady started crying, and he turned towards her. He was very bony,

Not all utterances of such a text are direct answers to the judge's question, i.e. specify visual properties of the bank robber. Those which do are regularly completed by utterances which give background information of different types, for example about what happened or why the eye-witness was unable to see certain things. The entire text is partitioned into a "main structure" constituted by the sequence of those utterances which are direct answers to the question, and into "side structures" which may also be communicatively important but are not directly related to the question.

Crucial to this distinction is the kind of question which the text is meant to answer. Had the judge's question been "What happened at that time in the bank?", then the "main structure" of the text would be constituted by those utterances which report individual "happenings", and all supporting information, such as, for example, a description of the bank robber, would constitute side structures. For the special cases of narratives, as elicited by (explicit or implicit) questions like "What happened (to person p) (at time t) (at place 1)?", such a distinction between "main structure" and "side structures" is well known under the labels "foreground utterances" and "background utterances" (cf., for example, Reinhart 1984). But as the example illustrates, narratives are only a special case of this phenomenon. In general, the *quaestio* of a text - the explicit or implicit question which the text is meant to answer - imposes such an overall structure on the text. It also imposes constraints on the utterances of the main structure because it is these utterances which are direct - albeit partial - answers to the *quaestio*. If the *quaestio* is

(10) What happened to Charlie Chaplin (and other people) in this film?

then a "foreground clause" must report an event, and this event must be something which happened to the protagonist or perhaps to some other person explicitly introduced. It cannot be a description (although such a description may be important in order to understand the action), nor can it be a comment or a moral evaluation, etc.

The quaestio not only imposes constraints on (a) the possible content, and (b) the topic-focus-structure of main structure utterances. If there is a connection between topic-focus-structure and utterance organisation, for example in word order, then the status of a given utterance with respect to main structure or to a side structure should have consequences for utterance organisation. This is what we observed throughout this study. An utterance which belongs to the "plot line", i.e., to the main structure, answers a question like "What happened next with p?", where p is Charlie or the girl. This is quite a different question from "Who took the bread?" or "Who was next on stage?" or "Where was the log?". Consequently, word order (and other structural properties) of the corresponding utterances may be very different. This fact explains a great deal of the variation in utterance structure of learner varieties which we - and other researchers - have observed. Ignoring it easily leads to a very strange picture of the internal organisation of learner varieties, on the one hand, and the developmental process, on the other.

7.2.2 Finite-nonfinite and the control asymmetry

Consider now a typical main-structure utterance such as

(11) Then, this girl stole a loaf of bread.

Focus is "steal a loaf of bread", topic is the various actions which the girl could have performed at that point in time (i.e., after the preceding action). The lexical verb "to steal" also defines a clear control asymmetry between the two actants: It is clearly the girl who is, or intends to, be in control of the bread, and not the other way around. Hence, both "Focus last" and "Controller first" pull in the same direction. But this may be quite different for other verbs; therefore, we will now have a somewhat closer look at the content of verbs and their structuring power in the utterance. A verb form such as "stole" actually clusters different types of information in a single word - it embraces a finite and an infinite component. A verb form such as "has stolen" separates both components, as does emphatic "did steal". Semantically, both components are compound again. This is best illustrated by contrasting these components to

other verbs.

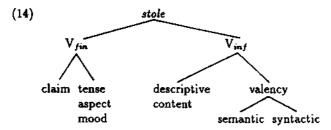
Consider first the infinite component of "steal". It first expresses a specific semantic content - "steal" in contrast to, say, "take" or "buy". And second, it has a specific valency: It requires two actants with specific properties. These properties concern certain functional roles ("thematic roles, case roles" such as "patient, agent, controller"), but also some formal properties such as "accusative, dative, nominative". Both types of valency largely converge; but there are also characteristic discrepancies. In fact, languages would be much simpler if there were a simple mapping like "agent is always nominative, beneficiary is always dative" etc., so there should be a reason why languages often deviate from this simple correspondence, and we will have to say a word about these discrepancies. Consider first the finite component. Its function is best illustrated in cases where it is clearly separated from the possible lexical content of a verb. This is the case for the copula, as in "Charlie was in jail". If in such an utterance, the copula "was" is stressed, then this can mark a two-fold contrast. First, there is the contrast to is/will be, as in

(12) Charlie was not in jail, he is in jail

In this case, only the tense component of "was" is contrasted to some other tense of "to be". Second, there is a contrast to "was not", as in

(13) You said that Charlie was not in jail. But in fact, he was in jail.

In this case, it is the "assertive component" or the "claim" as such which is stressed. There may be still other elements in the meaning of V_{fin} , such as mood or aspect, which we will not consider here. In may languages, V_{fin} is also marked for agreement. But this is just a formal marking, also found elsewhere (for example in particles or adjectives), not a part of the inherent meaning of V_{fin} . So, the entire information of a verb form like *stole* is something like



There are three reasons why all of this is mentioned here again. First, as we have seen, V_{fin} and V_{inf} , and finally the morphologically fused form V_{if} , behave very differently in utterances, both in learner varieties and in fully-fledged

languages. Second, nothing excludes in principle that only part of the meaning of some complex form belongs to the focus, whereas some other part belongs to the topic. Suppose, for example, the question to be answered is: "What has this girl done with the bread?". Then, all that has to be specified is one of the various actions she could have performed at that time with the bread, hence only the "descriptive content", hence V_{inf} (actually, only a part of V_{inf}) is in focus. A reasonable answer would be

(14) She has stolen it.

(with focus marking by intonation in this case). But what if $V_{\it fin}$ and $V_{\it inf}$ are fused in one form, such as "stole"? Shakespeare's English indeed allowed the separation of the finite and the infinite component by using "do" in these cases, as in "What did the girl do with the bread?" and the answer

(15) She did steal it.

But note that **stole** would also be possible here. In any event, such a neat separation of components of the verb is not, or less easily possible in other languages, such as German and Dutch. Consequently, other devices must be looked for, and this is one of the reasons why marking focus by just one device, such as "Focus last", is regularly replaced by a complex interplay of intonation, particles, etc.

Third, what matters for the "control asymmetry" is only the infinite component. It may or may not define such an asymmetry. It will be helpful to go briefly through some relevant cases. Consider first predicative constructions, such as Charlie was in jail, Charlie was the thief, Charlie was happy or - less possible in English, but perfect in German or Dutch - In jail was Charlie. There is no case role asymmetry in predicative constructions, hence a principle such as "Controller first" simply does not apply: Pragmatic and phrasal constraints rule. Next, we have lexical verbs with one actant. This single actant may well have a semantic case role (John was dancing - John was sleeping - John was missing), and this may even result in different case marking (German accusative subject, as in *mich friert*, is possible if the single actant is a sort of "patient"). But clearly, there is no control asymmetry, since there is only one actant. So again, organisation is by focus constraint and phrasal constraints. This is different for lexical verbs with two arguments. Here, the strength of the asymmetry may differ considerably, ranging from strong cases like The girl stole the bread via weaker cases like The girl saw the bread to almost no asymmetry, such as in Charlie was in love with this girl. Accordingly, the weight of "Controller first" may vary, and sometimes disappear. What if more than two actants are involved, as in *The girl passed the bread to Charlie?* Then, the simple notion of asymmetry in the degree of control cannot be sufficient. Verbs which require three actants are typically "two-state verbs", which involve, as a part of their lexical content, a source state and a target state, and semantic valency, hence the degree of control may be very different for both states. In the case of *The girl passed the bread to Charlie*, the two states may be roughly described as follows:

(16) source state target state

girl in control of bread girl active in bringing about target state Charlie in control of bread girl not in control of bread girl no longer active in bringing about target state

Clearly, the "control status" is different for source and target state, except that "the bread" is always low. The constraint "Controller first" would place the girl in initial position for the source state, and Charlie for the target state. In these cases, "Controller first" has to be complemented by an additional constraint, which defines the relative weight of source and target state in determining word order. In the few clear cases which we have found, this constraint seems to be;

S2. Controller of source state outweighs controller of target state.

Our data are by far too limited to decide whether this relative weighting applies in general, especially since both for source and target state, the control asymmetry can be overruled by focus (as is nicely illustrated by the placement of de-focussed constituents, such as French clitics or English dative shift).

7.3 The "basic variety" — what it looks like, how it is approached, and why development goes beyond

One of our findings (cf. section 7.1) is that all our learners, irrespective of source and target language, develop a particular way of structuring their utterances which seems to represent a natural equilibrium between the various phrasal, semantic and pragmatic constraints. In what follows, we shall first sum up the essentials of this "basic variety" (7.3.1). Then, we shall have a short look at how this variety is approached (7.3.2), and finally, we shall briefly discuss why many, though not all learners studied here give up this variety and move on towards the target language and its particular devices to build utterances.

7.3.1 The basic variety

Three phrasal patterns are regularly observed in the basic variety. These are

A.
$$NP_1-V-(NP_2)$$
B. $NP_1-Cop-\left\{\begin{array}{l} NP_2\\ Adj\\ PP \end{array}\right\}$
C. $V-NP_2$

Remember that NP_1 and NP_2 only differ by the types of noun phrases which can show up in this position (roughly speaking, NP_2 must be lexical, whereas NP_1 can also be a personal pronoun or an empty element).

Four points must be added. First, some learners do not have A., but

D.
$$NP_1-NP_4-V$$

a pattern which will be discussed in 7.5 below.

Second, C. is largely restricted to presentationals, which can be considered as utterances with a special topic-focus-structure (they answer a question such as "What/who was/appeared next on stage?"), although C. can also indicate other breaks in the referential flow, such as accidents. Third, we occasionally observe a third NP in pattern A. Data are insufficient to make generalisations about its position; but it seems largely determined by focus and control asymmetry (see previous paragraph). Fourth, all patterns can be preceded or followed by adverbials of time and space.

This is about everything that can be said about the phrasal constraints in the "basic variety". What remains to be said, is simple: "Focus last" and "Controller first" apply throughout, and if the verb is a "two-state verb", then the control asymmetry of the source state outweighs the control asymmetry of the target state (cf. 7.2). There is no uniform way to solve conflicts between the various constraints

7.3.2 Towards the basic variety

On the way from NUO to IUO and finally to FUO, the basic variety is to be located on the level of IUO - the structuring effect of the infinite verb is present, finiteness is still missing. How do learners get there?, or in other words, What

are the organising principles of NUO, if there are any? At the time of the first recordings analysed here, only a few of our informants were real beginners. Paula, Berta, Fatima and Ergün surely were; the others had, for different reasons, gone beyond that elementary stage, although many traces of NUO are left (as was said in 7.1, the transition is never abrupt, and all three types may co-exist to a greater or lesser extent).

Perdue (1987) studied the first retellings of Paula (reproduced in 6.4.2) and of Berta (6.5) in much detail. Neither learner had more than 50 words of French at this stage, and neither could have accomplished the retelling task unaided. For the "French" part of their production, the French interlocutor provided "scaffolding" in form of explicit questions: "prompts" - variations of the *quaestio* and "checkings", the latter eliciting different types of background information. These findings, and indications from the first retellings of other learners allow us to trace, with some uncertainty, though, the organising principles of NUO: Utterances accordingly are almost exclusively organised according to the (implicit or explicit) question they answer. In NUO, nominals are put into a relationship with a "predicative" nominal, adverbial, adjective or particle; or simply introduced into learner's discourse with optional contextualisation thanks to a temporal or locative adverbial. In other words,

$$(a) \qquad \qquad NP_1 - \left\{ \begin{array}{c} NP_2 \\ PP \\ PART \end{array} \right\}$$

is a precursor of A., in that it "answers" the *quaestio* such that NP_1 - referring to a familiar protagonist - is in topic, and

(c)
$$(Adv)-NP$$

is a precursor of C. in that it answers the variant of the *quaestio* "what next on stage?": it introduces a referent.

Examples of (a) are:

Examples of (c) are:

Paula & Berta (cycle I))	une femme 'a woman'
Fatima (1st retelling)	dan 'then	met de man with the man'
Ergün (1st retelling)	daar 'there	ook de man also the man'
Gloria (6.5.4)	aujourd'hui ici 'today here	<pre>quatre familles *con problemas* 4 families with problems'</pre>

During the course of the analyses, we have often described utterances as "copula-like", i.e. as pattern B. "minus" the copula. These utterances provide various types of background information and, as we have often said, the referent of NP_1 is in topic. Examples of precursors of B. are:

Madan (cycle I)	daughter's dad	no job
Ergün (1st narrative)	die	kapot
	'that	broken'
Fatima (1st retelling)	<i>meisje</i> 'girl	honger hungry'
Paula (cycle II)	les deux the two of them	content happy'

The relations between the constituents of all these utterances are few in number; they are those that a listener can recover in context, roughly: "be/have", "become", "move", "say" and "give"². This pragmatic organisation is systematic: in cases where verbal meaning was not redundant, learners resorted to a SL item or some other (verbal or non-verbal) paraphrase to convey the desired meaning (see especially Paula, 6.4.2 and Angelina 4.3.2).

The tendencies set out in this paragraph are indeed merely tendencies, given the data-set. But it makes sense to postulate such an organisation³. It derives from independently motivated principles and underlines the continuity of the acquisition process. Other principles - S. for example - come to contribute to utterance organisation as verbs are acquired, as we have seen. But they do not take over, they interact with already operational principles to form a new and more complex systematicity.

7.3.3 Why go beyond the basic variety?

Up to and including the basic variety, the development of all learners is not identical, but remarkably similar. It seems that the way of structuring utterances as found in this variety represents a relatively stable and natural equilibrium between semantic, pragmatic and phrasal constraints. It is perhaps not accidental that we find essentially the same patterning in pidgin languages (cf. Romaine 1988). Why, then, does the process not stop at this point? It indeed fossilises here for some learners, but surely not for the majority.

We think that there are basically two reasons. The first, and most obvious, is the on-going "influx", that is, the permanent exposure to the language of the social environment, and the difference which the learner perceives between his own productions and those of the people he is talking to. It may well be that children are much more sensitive to this factor, because they are better in perceiving differences, and also because they care more for "becoming identical". An adult second language learner has a more or less defined social identity, a child has to acquire this identity: he must become like the others around him, hence must "copy" their language to the largest possible extent. We shall not follow up this point here (for a discussion, see Klein 1986, chapters 2 and 8).

There is a second reason to step beyond the basic variety, and this is its "inadequacy". It is inadequate, first, because its lexical repertoire is very restricted; this is blatantly clear in the language of our informants. But note that this "lexical inadequacy" in itself is no reason to give up the utterance organisation described above: After all, it would suffice to add more nouns, verbs, temporal, spatial and modal adverbs, etc., which can be fed into the slots available⁴. But this is not what happens: Learners develop new ways of putting their words together. There is also a "structural inadequacy" - it is the inability to deal with conflicting requirements. The basic learner variety works structurally so long as the phrasal, pragmatic and semantic constraints can be reconciled. But this is not always the case. We have seen many cases in which, for example, a "controller" is at the same time in focus. Then, the learner must violate either "Focus last" or "Controller first", and consequently, the NP is either wrongly marked as non-focus, or as non-controller. This forces the learner to develop and to apply new devices, such as intonation, particles (rarely in our data), or various "cleft-constructions" (c'est ... que "it is ... who"), preposed es in German, and many others. It is these latter constructions which contribute so much to the complexity of fully-fledged languages, including the discrepancy between "semantic" and "syntactic" valency (or "theta grid" and "case assignment"). They allow learners to overcome the incapacity of the basic learner variety to deal with cases of competition. It is therefore these conflict cases which function as a major germ of structural development. This further development is no longer uniform: It varies considerably with the source and target languages involved. Some aspects of this development will be considered in the next section.

7.4 Competing constraints: development beyond the basic variety

In this section, the development of three morpho-syntactic phenomena will be sketched - the third person pronoun system, verbal morphology, and (some aspects of) subordination - which take a basic variety towards a target language. An attempt will also be made to identify some of the reasons which determine this development, which, to repeat, is not evidenced by all the learners studied.

Where development does take place, acquisition paths begin to diverge towards the different target languages: the same communicative motivation for developing linguistic means now can have different ramifications within the learner variety, and development is more uneven, partly as a function of the characteristics of the source- and target language pairings. This latter aspect will be taken up in section 7.5 below.

7.4.1 Development of a third person pronoun system

The basic variety comprises minimal means for reference to speaker, hearer and a third person. We will be concerned here with the development of third person anaphoric pronouns.

None of the pronouns is central to the basic variety evidenced in the retelling task for different reasons. Firstly, use of first and second person pronouns in the text-type examined is restricted to meta-communicative comments and to directly quoted speech, as in the *you* of Rudolfo's (example 17); secondly, as was mentioned in section 7.1(c), where reference to a protagonist is maintained in the topic component of successive utterances, zero anaphor is the rule, as in this example from Rudolfo, the Italian learner of English of chapter 2:

- (17) chaplin think the return in the prison
 - Ø go to the restaurant
 - Ø eat too much
 - Ø tell the police "when you pay"

Although there is some overlap between \emptyset and the third person pronoun, the latter is also used in other contexts: for example, it is reserved for re-introducing the main protagonist (Charlie Chaplin in almost all the retellings) in topic, or for maintaining reference, in topic, to a protagonist referred to in the focus component of the previous utterance. In all cases, however, pronominal means are confined to NP₁: it is in this sense that referential continuity "hinges" on the pre-verbal NP.

The learners' basic variety has devices allowing them explicitly to introduce referents, re-introduce referents, and to maintain reference. It is this latter case which interests us here. Three types of reference-maintaining device are available in NP₁ position: zero anaphor, pronoun and lexical NP. This latter can consist of a proper name, bare noun, or noun accompanied by the definite article, or for some learners, the demonstrative article. Definite NPs are used in NP₁ when use of pronouns or 0 might create ambiguity by indexing another potential referent in the preceding discourse. In other NP positions in the utterance, hence for referents in focus, the only reference maintenance device available is the definite NP.

The limitations of this sub-system are specified in the previous sentence. They can be illustrated by a passage of Andrea's (from 3.4.3). He is recounting the tribulations of two female protagonists who are on stage and known to the interlocutor:

(18) the blonde friend_i tell other woman_j about the son of that woman_j ...

that woman_j knock very strong the door for open or break the door ...

and the blonde friend_i tell other woman_j to call the emergency

and other woman_j call the emergency with the telephone but she_j cant to explain very well the situation ...

and the blonde girl_i help that woman_j

and Ø_i explain to the police the situation

For someone who knows the story, the passage is reconstructible, whence the subscripts: reference is maintained by zero anaphor, by a pronoun and by many full, definite NPs. (other N in this variety is a definite NP as can be seen.) But in real time production, there surely is a problem - the problem of the degree of specification of the referents.

Marslen-Wilson *et al.* (1982) studied the devices used by a native speaker of English to establish and maintain reference in a retelling task. They found that when maintaining reference, the speaker used lexical NPs, pronouns, and Ø in

very precise ways, nicely specifying the referent, i.e. avoiding underspecification or redundant overspecification⁵ of the referent. The problem illustrated by (18) is that outside NP₁, Andrea sometimes *cannot but* overspecify. This is a limitation of the basic variety.

The development of oblique pronominal means ('oblique' approximating to the target languages' various accusatives, datives, possessives) allows better cohesion in that it allows specific reference maintenance outside the controller-in-topic configuration: the overspecification illustrated in Andrea's example is overcome. This development is important, as it breaks the semantic-pragmatic coalition (S. & P.) favouring (if not imposing) specific referential chains in NP₁ position.

Given the above considerations, and bearing in mind the specific content of this task, the following generalisations can be made:

- (i) definitely referring lexical NPs are used before overt pronouns;
- (ii) singular anaphoric pronoun reference appears before plural;
- (iii) human appears before inanimate;
- (iv) nominative appears before oblique.
- (iv) is a shorthand, of course: The pronoun of the basic variety only takes a 'nominative' value with the opposition ensuing from the acquisition of the oblique pronoun. With the acquisition of case-bearing pronouns and some verbal morphology (see 7.4.3), a 'subject' constituent can be recognised in utterances. Up to and including the basic variety, however, there is little if any justification in postulating such a constituent (see Klein and Perdue (1989) for a discussion, and 7.7 below).

The step to acquisition of an oblique pronoun can be stated in terms of competition between the initial semantic and discourse-organisational constraints S. and P.:

How to keep a protagonist in topic while signalling discontinuity of control?

For the learner operating with a basic variety, this is a problem to be solved, or avoided. It can be illustrated by reference to a scene in the retelling which involves an accident, a situation where control is not relevant since no intention can be ascribed to the actants:

Charlie opens a door and gets hit over the head by a falling beam.

The mishap is (funny and) unexpected, that is, it represents a break in a 'normal' series of actions. The competition in relation to the basic variety is therefore

complex, in that personal reference continuity, and also discontinuity of control, need to be signalled. An initial solution learners adopt is to analyse the scene in spatial terms as the association of a 'theme' (an entity to be located) - the beam - and a 'relatum' (a location, see Glossary) at goal - Charlie's head:

(19) Rudolfo (Italian-English) one piece of wood bang in the head
Ravinder (Punjabi-English) some timber coming head

Ergün (Turkish-Dutch) die dinges komt die hoofd
'the thing come the head'

Abdelmalek (Moroccan-French) tableau... tombe dans la tête
'picture (=beam) fall in the head'

Head, and equivalents, is understood in association with Charlie, and the utterances are comprehensible. The problem is that the order "theme-relatum" is the one attested elsewhere in contexts of referential continuity (as we saw in 6.4.3: see Becker, Carroll & Kelly, 1988, for more details), so the 'mishap' status of the event is not explicitly signalled, and moreover the "Focus last"-constraint is overridden; we may imagine the utterances of (19) "answering" the implicit question: "What happens next to Charlie Chaplin?"

A more cohesive solution involves manipulating the scene so that reference can be maintained to an entity in NP_1 : Santo (see 3.5.1) chooses explicitly to introduce the beam - in focus - and then describe the action:

(20) have the one wood ... 0 fall on the head

It is the acquisition of an oblique anaphor (pronoun or adjective) which allows the learner to maintain personal reference in topic while at the same time signalling discontinuity in roles of NPs denoting the same referent across utterances by associating the V-NP2 pattern with this anaphor, which serves to contextualise the utterance, functioning as a 'relatum' for the NP $_2$ 'theme'; the constituent ordering is then 'relatum' - 'theme', an ordering used by learners in other contexts of discontinuity:

(21) Paula and Gloria (see 6.5): [le] tombe un bois sur la tête

Ravinder (cycle III): [hiz] drop-on the timber

Tino (cycle II): oben seine kopf geht ein stück holz

hiz and le in these examples can be glossed as (a 'dative'-like) "to him". le is a development from a pre-verbal prefix discussed below in 7.4.3. hiz is one realisation of a multifunctional morpheme analysed by Huebner (1989).

This particular example has been chosen to illustrate the 'competition' in order to show that solving the competition implies more than a search for a direct or indirect object pronoun (although the competition also motivates this search in other contexts). Here, [hiz], etc., function as *locatives* in the topic component of the utterance.

The complexification of third person anaphors is a first illustration of development beyond the limitations of the basic variety. However, although the *motivation* for the development of these anaphors (as evidenced in this particular task) is comparable across languages, the *grammatical consequences* are different depending on which target language is being learned, and more or less easily analysed by the learner depending on the characteristics of the source language. Learners of French, for example, have to analyse that language's pre-verbal auxiliary-clitic system in order for third person anaphors to become completely functional. We return to the consequent unevenness of acquisition in section 7.5 below.

7.4.2 Focalisation devices

The competition of constraints to be considered here is the mirror image of that discussed in the previous section: given that the semantic constraint places the 'controller' of a situation in NP₁ position, and that the discourse-organisational constraint places focussed information at the end of the utterance, how do learners convey that a controller is in focus?

This competition of constraints can be best illustrated from a scene in which various characters accuse themselves and each other of the theft of a loaf of bread. The utterances in question function as an answer to an (implicit or explicit) identification question: "who stole the loaf?" where the controller - the real or counterfactual author of the theft - is the focussed actant. (These answers can be accompanied by a different type of utterance negating a previous identification - 'NP is the thief', or 'NP stole the loaf' - in which the focussed information is the negation itself.)

Given the constraints of the basic variety, then, this is a problem for learners to solve, or avoid⁶. Avoidance can take several forms, over and above simply leaving the scene out of the retelling. Some learners 'sacrifice' one or other of the constraints: sacrificing the focus constraint (P.) keeps the controller in NP₁:

(22) Vito (chapter 2): mädchen nehme brot nix mann 'girl take bread not man'

'Sacrificing' the semantic constraint (S.) keeps the focussed information towards

the end of the utterance:

(23) Madan (cycle I): stealing bread girl

Constraints are sacrificed reluctantly, as the many self-corrections and replannings in this context testify; the competition provokes for about half the learners studied the acquisition of some device which specifically marks the relevant actant as in focus. Mohammed (5.5.2) and Fatima (5.4.2) adopt a lexical solution: the word *zelf* "-self" associates with the focussed actant, which, although not last, is marked:

(24) *die meisje zelf doen* 'the girl self do'

A natural focus marker in all the TLs would be the cleft construction, which extracts an actant from a basic utterance pattern, thus marking it as being in focus. Learners do approximate to this construction (with striking success in the case of the Spanish-French pair), building on an already acquired marker of identification which is usually a variant of the TL copula:

(25) Ravinder (cycle II): is she pinching

Rudolfo

and Santo (cycle III): is not the man steal the bread is the girl

Zahra (cycle II): [se] la fille [evole] le pain

Italian learners of German, and Moroccan learners of French further grammaticise cleft structures towards the end of the study with the particles [di], [te] respectively, which are 'equivalents' of the optional *that* of the cleft. The Spanish learners of French on the other hand use from very early on a multifunctional particle [ke], which associates naturally with [se] in a recognisable cleft construction, and is further analysed by the most successful learner - Gloria into oblique [ke] vs. nominative [ki]. Compare the last attempt of the Moroccan learner Zahra, with that of the Spanish learner Gloria:

(26) Zahra (cycle III): [se] la dame [te] [vole] le pain

Gloria (6.5.1): [se] lui [ki] a vole le pain

It indeed seems from the development described here that the relative complexification of utterances observed in some learners is again due to a dissatisfaction with the limitations of the basic variety in this sense: complete avoidance, or simply ignoring some constraint on an utterance will not do; devices are acquired to mark a specific coalition of semantic and pragmatic constraints. As these devices grammaticise utterances further, the initial topic-focus division of utterances becomes less clear.

7.4.3 Development of verb morphology and means for subordination

By the end of the longitudinal study, some learners had developed morphological oppositions on the verb, and one may ask in which contexts this morphology appears, and for what communicative effect?

Similarly, there were no subordination relations in the basic variety, and a similar question can be asked about the observed development of means for subordination.

In view of the task, the initial absence of subordination is unsurprising as subordination usually (but with some exceptions) functions to background material in a narrative, and the basic variety is developed apparently to cope with getting through the plot. The verbs are non-finite, so actions (in correspondence with the narrative *quaestio*) are understood to be perfectively presented foreground material. So for a series of actions, it is inevitable that their interrelationship will be proposed and interpreted according to the principle of natural order (PNO): events are recounted in the order they happen. Some learners address themselves to the double competition: how to background actions? and how to break the chronology of actions? and a widespread answer is, try to develop subordination. The actual means for subordination range from intonation breaks, via chaining arguments together, to explicit target language subordinators. These latter will be briefly discussed in 7.5 below. What is at issue here is the motivation for development, whatever its shape.

Learners develop therefore (varied) means to:

- (I) frame protagonists' speech, thought and perceptions;
 Madan (cycle I): woman see girl bread stealing

 Andrea (cycle III): after ten days they meet again
 - and she tell him that she find/found one house
- (II) provide complex temporal contextualisation for an upcoming utterance by backgrounding an action in the topic component of that utterance using *when, during,* and equivalents;

Santo (cycle II): between the van going in the police station

0 take another one customer

(III) to provide further attributes of a referent when the full definite NP does not identify sufficiently fully;

Andrea (cycle I): the woman *che* work in the cooking (=kitchen)

(IV) to express purpose or cause;

Andrea (cycle II): they think about one house for live together

- (I), (II) and (IV) combine in the following complex example of Santo's:
- (27) Santo: because the chaplin when lost the job *dice *
 "better i go in the prison"

The examples above show that in a film-retelling, the speaker is not required to anchor events in a 'real' past, as in a personal narrative. The bare verb is used for foreground actions, and it contrasts with -ing and the past, which then take the relational values of simultaneity/inclusion and anteriority, respectively.

Contexts (I)-(IV) tend to correspond, although the correspondence is not necessary, with breaks in the chronology of events. It is *in these contexts* that learners initially develop tense and aspect markings.

The above examples are from learners of English. Abundant 'equivalent' examples are to be found for the other TLs in chapters 3-6. However, for this target language, past morphology changes the form of the verb, and there are no further ramifications in the utterance. For learners of Dutch and German, however, expressing the *same* temporal value involves approximating to those languages' Perfectum, and this necessitates a major reorganisation of the constituents of the utterance. As in English, a new verb form must be acquired for the main verb. But this is the result of the learner's successfully analysing the finite and non-finite components of the verb group: the main, non-finite form is placed in utterance-final position, whilst a finite auxiliary fills the V-position in the basic pattern, giving the specific pattern:

E.
$$NP_1 - V_{fin} - (NP_2) - V_{inf}$$

For Mohammed (cycle III), all this acquisition work is necessary in order to attribute to the girl the property of having stolen the bread (III):

(28) die meisje die heeft brood gesteeld 'the girl that has bread stealed'

In this paragraph, converging reasons for going beyond limitations of the basic variety as regards the overall temporal structure of the retelling task have been suggested for the complexification of utterances described - in particular as motivating the move from IUO to FUO. As in the two previous sections, *similar* communicative motivations result in the acquisition of *different* linguistic means as learners approximate to the different target languages.

7.5 Possible influences of the source language

It is the more or less urgent requirements of this type of narrative task which have been proposed up to now to provide the general answer to why the learners studied showed development in clause structure. Establishing the basic variety seems 'urgent', in the sense that all learners did so; developing oblique pronouns or verbal morphology seems less urgent. The different paths this development took going beyond the basic variety have so far been attributed without further specification to learners' attempts to find (target language) means to satisfy the requirements in question. These factors do not suffice, however, to account for the greater or lesser success shown by sub-groups of learners in the areas examined. This variability will be illustrated by pointing to some difficulties in establishing one pattern of the basic variety:

D.
$$NP_1 - NP_4 - V$$

and development to and beyond this pattern.

Discussion of the relatively infrequent pattern D. was reserved for this section as its status within the basic variety is somewhat problematic. It is attested early in the production of Punjabi, but not Italian, learners of English, then dies out; early for Turkish learners of Dutch, and it is one of the first developments out of the basic variety for learners of French. It is likely (cf. Jordens, 1988) that initial Turkish learners of German develop in the same way as the Turkish learners of Dutch. The learners in the present study were too advanced at its outset to examine this particular aspect of their development.

Given the difference between Italian and Punjabi learners of English, it seems reasonable to suppose that the fact that Punjabi utterances are generally verb-final accounts for the presence of this pattern at all. Its existence is precarious, as the overwhelmingly NP-V-NP pattern of the target input is taken in early. At the stage where D. is attested, Punjabi learners have not developed systematic article distinctions; NPs are massively realised as bare N, with position indicating their referential status (as indicated in chapter 3.6.2). For the few examples where these patterns contrast, the preverbal NP₄ is more presupposing, and the postverbal NP less so. Thus Madan (cf. 7.4 above) even contrasts girl bread stealing with stealing bread girl.

For Turkish learners of Dutch, D. is the more frequent pattern at the outset, and co-exists for a time with A., whereas A. dominates in the production of Moroccan learners. Again, the standard classification of Moroccan as SVO, and of Turkish as SOV, would account for this distribution.

Both groups of learners start out with NPs whose most frequent internal structure is bare N. The referential status of these NPs is conveyed by position, as described above: NP₁ is most frequently definitely referring, and more presupposing than the other actants, as can be seen in the following short sequence of Mahmut's:

```
(29) die broodbaas zegt "..."

'she breadboss say "..." (= the woman says to the baker)

baas politie vragen

'boss police ask' (= the baker asks for a policeman)

en dan politie komen

'and then police come' (= and then a policeman comes)

Ø meisje roepen
```

'Ø girl call' (= he shouts after the girl)

From the evidence available, it seems that for the Turks, A. gains ground concurrently with the development of explicitly determined NPs, that is, with devices other than word order for marking referential status. Amongst the definite NPs developed, we can include here the oblique anaphors. Before the development of finite and infinite verb components, there is therefore a stage where the alternative patterns - A. and D. - are found in the Turkish learners' production and the tendency, but it is only a tendency, is for the Turks then to reserve the hitherto dominant D. for contexts where both NPs are definitely referring. The major development to a finite utterance organisation seems therefore to occur once the position of the NP relative to the verb is no longer crucial for signalling its referential status: NPs are explicitly determined in this organisation:

```
(30) Ergün: die brood is van hem hand staan
'That bread is of him hand stand'
(= he held the loaf in his hand)

dan hij heeft de politie gezien
'then he has the policeman seen'
```

For learners of French, D. represents a step *out of* the basic variety. It is the context for the oblique pronoun, and this is the only type of referring expression allowed in this context. The development of this pronoun is however very uneven between the source languages. Spanish speakers achieve a significantly better command of this context than do the Moroccan learners, and Spanish, not Moroccan, has a very similar system. But this is not to say that Moroccan learners are 'deaf' to the pre-verbal clitic system: after the initial stages, both groups of learners perceive and reproduce a verbal 'prefix' [le] in two specific

contexts - before TL 'dative' verbs, *donner*, etc., and before verbs conjugated with *être* in the TL (cf. Perdue & Deulofeu, 1986):

(31) Zahra (cycle I): [leparti] tons les deux 'le- leave both of them'

Berta (cycle II): *le camion [letombe]*' the lorry *le-*fall over'

The Spanish-speakers clearly perceive, however, a similarity of functions with the source language for this prefix: by the end of the period of observation, *le-* has evolved into the 'être' passé composé on the one hand, and the oblique pronoun on the other:

(32) Berta (cycle III): les trois [sõn tõmbe] par terre 'the three are fallen to the ground'

Gloria (cycle II): quelque chose [ke le a di] la petite fille 'something that to-him has said the little girl'

For the Moroccans, functional analysis is more difficult and takes much longer.

In sum, D. is marginal to the basic variety of 7.3. Its appearance, the stage at which it appears, and indeed its non-appearance can be explained by an appeal to the source language expectations of the learners providing a more or less successful analysis of the target input. Its history and geography are an exemplification of Kellerman's (1986) prediction that source language-target language similarity perceived by the learner leads to successful acquisition. *However*, at some stage of the development of all these learners, use of D. contrasts with use of A. D. is a functional hypothesis for those learners who use it: it is reserved for contexts of high referential continuity.

The variable development of explicit subordinators between the language pairs provides a final example of SL influence. For reasons of space, only the two most successful cases will be mentioned in relation to less successful acquisition of the same target languages. In cases of clearly perceived similarity, learners "scaffold themselves" by reference to source language means. SL borrowings occur in the initial attempts at subordination by Italian learners of English and by Spanish learners of French. In this latter case, the ubiquitous subordination (and co-ordination) marker [ke] appears very early. For Punjabi and Moroccan learners of English and French respectively, analysing the input by reference to SL subordinating devices is less facilitative, and acquisition is slower, and less successful during the period of observation.

7.6 Uncontrolled factors

We briefly discuss here two things that have not been attempted in this work. Firstly, no attempt has been made to account for individual variation. Some of the difficulties of such an attempt are discussed in 7.6.2. Secondly, no proposal has been made for overall orders of acquisition other than that there is development to what has been termed a 'basic variety' for all learners, thus, as a rule, the patterns and constraints of this variety are acquired before the various, and partly ordered, developments of section 7.4. The data set is too specific to generalise further: to make more grandiose statements about acquisition orders, other text-types and other activities would have to be included, and this poses the problem of the relation of the results set out here with those of our learners in other activities.

We obviously cannot do this here. We merely try in the next section to sketch how a detailed comparison *could* proceed, while restricting ourselves to two phenomena discussed in 7.4: the development of tense and of pronominal reference.

7.6.1 The retelling in relation to other activities

As we have seen in detail throughout this volume, the ability to organise an utterance in connected discourse involves (amongst other things) developing information from different referential domains; the way in which the information is developed is constrained by the *quaestio* of the type of discourse. With this perspective, we may very briefly compare the results of this study with some of those more directly pertaining to utterance organisation from the two other research areas of the ESF project which were concerned with production data: temporal reference (cf. Bhardwaj *et al.* 1988) and spatial reference (cf. Becker, Carroll and Kelly 1988, and Carroll 1990). The activities which comprise the main data base for these studies are respectively personal narratives, and a type of instruction-giving; the former shares many features with the retelling task, but there are some clear differences as well, whilst the latter has more differences than similarities.

Personal narratives "answer" a slightly different quaestio from that of the retelling:

what happened with you at t?

where *t* is the time-span for the narrative: for example, Tino's (Italian-German) first recorded narrative is provoked by the explicit question: "what happened to you last weekend?". The topic-focus organisation of the utterances of the story line is similar, but in contrast to the retelling, the narrative privileges *first person* reference, and has to be anchored in *past time*. This contrast is clearly illustrated by the first two utterances of Berta's first narrative.

```
    (33) a. [3e] mm + quand petit + la mer < comme ça>
        'I mm + when small + the sea like that < gesture of fright>'

    b. mais moi la mer + les vagua < >
        'but me the sea + the waves < gesture pulling out to sea>'
```

In the instructions (so-called "stage directions") the learner instructs a naive experimenter to move, and to manipulate sundry objects according to a predefined sequence (as a director would instruct an actor). Here, the learner is answering an implicit question of the type:

what must I do next (with x)?

where x is an object which is identifiable in context (i.e. visible and not part of a set of objects, see Carroll 1990:1015). If x is not identifiable, then x must be introduced and located in answer to a more open (implicit or explicit) question:

what to do next?

Here we see a parallel (34a) with the retelling's presentationals, as in this extract from Berta's first stage directions:

```
(34) a. la + *una* boîte +
 'there + a box +
b. *pone en* la table
 'put on the table'
```

Both of these activities follow a temporal sequence, and both can be seen in terms of relating a *theme* (=the entity to be located) and a *relatum* (=the entity in relation to which the theme is located). In the personal narrative, the initial relatum is *at t*, which may be expressed deictically, or by a non-deictic adverbial as Berta's (33a). As in the retelling, local anaphoric relata - "then" - are part of the topic component of each foreground utterance, and can be explicit or not; these relata locate the theme, the focussed event. In the stage directions, the addressee and/or x is the theme, and forms part of the topic component of foreground utterances ('the box' is the implicit theme of 34b), whilst the relatum

is the position x occupies at goal ('on the table' in 34b). In the presentational (see 34a), the opposite order - relatum+theme - may obtain⁸.

An examination of these tasks will allow us to place in a wider context some of the results from the present study concerning (a) the development of FUO, and (b) pronominal reference.

(a) The overall development from noun-based, to infinite, to finite utterance organisation is clearly reflected in these other activities. As in the retellings, beginners' attempts are highly scaffolded.

The same learners who achieve a finite utterance organisation in the retellings also do so in their personal narratives. Tense is generally the *last* means developed to locate the narratives *at t*. Before this, adverbial means are developed, with the effect that the temporal relatum of the topic component of individual utterances is relatively more complex, relatively earlier than in the retellings. In particular, *when*-phrases (cf. ex. 33a) are attested early: almost all learners have *when*-phrases by the end of cycle I (Bhardwaj *et al.* 1988:506). It seems, then, that there is no clearcut development in the use of tense for deictic, then for anaphoric reference. Tense is a *late* development in personal narratives, as it is in the retellings. Finite utterance organisation is therefore generally a *late* development.

The development from noun-based, to infinite, to finite utterance organisation is reflected in the stage directions, albeit indirectly for the latter stage. Although native speakers typically refer to the addressee (only resorting to the imperative for repair sequences), it is communicatively not necessary to do so (Carroll 1990:1012). Beginners leave not only the addressee but also the motion implicit, relying on the iconic order *theme-relatum*, as in this fictitious version of (34):

$$(34)$$
 c. $boîte + table$

to have the instruction carried out. The 'presentational' order of (34a) is *not* used by beginners (with the exception of Spanish-speakers learning French, such as Berta, for reasons which will become immediately obvious). Word order is the only linguistic means available at the outset to distinguish theme and relatum, so other strategies are used when the necessity arises to identify the theme, as in (35a) (Italian-German cycle I):

(35) a. guck de journal 'look-for the paper'

The relatum+theme order becomes possible when *local oppositions* can supplete word order, as in cycle III:

(35) b. vor die tasche eine zeitung 'in **the** bag **a** paper'

The contrastive orders are used earlier by the Spanish speakers of French precisely because they are very fast to approximate to the definite/indefinite article distinction of French. The tendency noticed in the retellings for local markings to be acquired *before* constituents can be re-ordered on the way to finite utterance organisation does seem to be quite robust.⁹

In the very first personal narratives, 'I' and equivalents are used very regularly in all SL-TL pairings; moreover, first person plural and oblique forms (accusative, dative, possessive) are attested from the elementary stages (cf. ex. 33). (Second person forms are as rare in the narratives as in the retellings and, as we have just seen, communicatively not necessary in the stage directions.) The deictic forms *this, here* and equivalents are used in both activities from early on (cf. ex. 33a, 34a). Although the stage directions experiment crucially involves referring to objects, reference is maintained implicitly where no ambiguity is involved (cf. ex. 34b), otherwise a full noun is used. Anaphorical pronominal reference to objects is then a *late* development in this activity, as it is in the retellings. This finding is in accordance with the pronominal development set out in 7.4.

The above description points out to the extreme difficulty that there is in accounting for the development of pronouns as a *class*. We have seen that in general, deictic uses of pronouns, whatever the type, tend to precede anaphoric uses. Correspondingly, first person pronouns are used earlier, and show morphological contrasts earlier, than third person pronouns in the data examined¹⁰. Third person pronouns maintaining reference to humans are used earlier, and show morphological contrasts earlier, than those maintaining reference to inanimates (see 7.4.1); pronominal reference in subordinate clauses takes longer to develop (see 6.4.3), and so on.

It follows that studies producing acquisitional statements based on a category as broad as 'pronoun' are hard to evaluate. Even a careful longitudinal study such as Hilles' (1986) analysis of her subject Jorge's "pro-drop" shows little more than the undeniable fact that Jorge made gradual progress in English over the period of observation - the category she measured is too all-encompassing to be informative. ¹¹

7.6.2 Individual variation

An answer to the puzzle of inter-subject differences in the overall speed and success of the acquisition process has traditionally been sought in possible correspondences between levels of achievement and "extrinsic" (language external) determining factors: "propensity" factors such as learner attitudes, motivations and needs, and "environmental" factors such as the extent and contexts of language contacts. This had been the approach (or part of the approach) of the three major projects on untutored language acquisition whose results were available as we were designing the ESF-project: the Heidelberger Forschungsprojekt "Pidgin Deutsch" (HPD, see Klein and Dittmar, 1979), who conducted a cross-sectional study with a population of 48 Spanish and Italian workers; Zweitspracherwerb italienischer und spanischer Arbeiter (ZISA), who conducted a cross-sectional study with 45 Italian, Spanish and Portuguese workers (Clahsen, Meisel and Pienemann, 1983), as well as a two-year longitudinal study with 12 learners of the same nationalities (Clahsen, 1984), and Cazden, Cancino, Rosansky and Schumann (1975), who conducted a 10-month longitudinal study with 6 native speakers of Spanish: two children, two adolescents (one of whom is Jorge, cf. 7.6.1) and two adults (one of whom is Alberto, cf. 3.6.3).

We have not been able to improve on this type of finding, and refer the reader to Broeder *et al* (1988) for an informal attempt to relate extrinsic determining factors to the extent of learners' repertoire over time. This study shares 13 learners with the present study, and examined both the *Modern Times* retelling and contemporary conversation. We may note, to use a phrase of Broeder *et al* (p. 59) an "absence of clear contradictions" between the progression of the 13 learners described here, and the overall proficiency figures for each learner in relation to the information in his/her socio-biographical profile described by Broeder *et al.*

Good though we may feel about the previous paragraph, there are at least two unsatisfactory aspects to the statistical evaluation of the speed and overall success of the acquisition process: it is difficult to establish which factors are relevant, and even if this can be achieved, it is difficult to measure the impact of the relevant factors on the acquisition process. Overall, propensity and environmental factors are surely relevant, but such a statement is far to all-encompassing to be informative. It is also very problematic to see in exactly what way measurable socio-biographical variables - age, level of schooling, time in the target country, etc. - would determine individual acquisition, that is, in what exact way they provide the linguistic input (see 7.3.3) relevant for the motivated learner

at a given point in time. One is left with global correspondences between bundles of extrinsic factors and overall levels of proficiency, which themselves are uninformative (see 7.6.1).

That is why we attempted a study involving comparative, in-depth studies of individuals over time: in a space of considerable variation, at least the common processes emerge (and it is difficult enough to account for them).

7.7 Towards a theory of the logic of acquisition

This work has summed over about a year and a half in the L2 acquisition of twenty adult learners. Their paths towards a TL were selectively described on three occasions when they undertook to retell a film, and factors of two sorts were suggested to account for the varying success observed: the 'intrinsic' requirements of the task itself, and the influence of the learners' SL. These factors interact.

The approach we have taken is sufficiently different from other, more structuralist, approaches in second language research, for those differences to be emphasised. It has been assumed here that organisational regularities on whatever level - morphological, phrasal, discourse - affect each other¹³. Thus development at any one level cannot be understood in isolation: it will be motivated by the communicative limitations of the interaction it proceeds from, and will result in a new interaction of constraints, i.e., will very likely affect the shape or scope of other levels. For example, it is clear that the morpho-syntactic development described in 7.4 progressively curtails the generality of the pragmatic constraint P. of the noun based organisation of 7.3.2 as the distribution of 'topical' and 'focussed' items becomes less watertight. This can be spelled out by taking a final look at the way in which the developments of 7.4 interact, and in doing so, how the function "'subject" develops. "Subject" was, as we already saw in chapter 2, redundant for the characterisation of utterance organisation in the basic variety. The constraints S. and P. together determine the respective places of actants around the verb. But for those learners who progress further, the relative weight of morpho-syntactic constraints increase in:

- (i) the contrastive use of nominative and oblique pronouns, and thereby pronominal reference maintenance on other actants than NP₁;
- (ii) correlatively, the appropriate use of the definite/indefinite article distinction leading to the systematic marking of indefinite pre-verbal, and definite postverbal NPs.

These are, almost, pre-conditions for the passage from infinite to finite utterance organisation: the utterance-internal adjustments this passage entails - especially for Dutch and German - require *local marking* of the referential status of the actant, and of its relationship to the verb, since the *position* of the actant in relation to the verb no longer suffices to convey this information. Hence, the emergence of a *subject;* hence, the fact that those few learners of Dutch, German and French who develop

(iii) embryonic subject-verb agreement,

already master (i) and (ii).

As development is provoked, grossly speaking, by attempting the expression of a certain content in a certain context, it follows that development is gradual. The development of verbal morphology, for example, is far from being instantaneous; for the analyst, it is lexically and discursively identifiable, as we have seen in 7.4. For the learner, it is communicatively *motivated*.

The above acquisitional sequence throws light on one other puzzle, namely, the virtual absence of the passive in foreground utterances, and of non-agent-oriented verbs such as *receive*, *recevoir*, *bekommen* from the learner (but not the native speaker) corpus: the constraints on the basic variety preclude their use; logically, they are used later, in relation with a subject NP.

The findings therefore illustrate an approach which takes into account the greater or lesser success of a learner variety *in use* - what was termed 'intrinsic' explanatory factors above - to account for development. The approach involves looking in detail, over time, at how learners go about solving the task at hand: here, arranging words in utterances to construct a narrative discourse.

Why go to all that bother?

The reason is that we - like others - are trying to build a theory of language acquisition, that is, establish a set of general principles under which the observed phenomena can be subsumed and from which hitherto unobserved phenomena can be predicted. Our re-construct ion of the acquisition paths of our learners has uncovered some explanatory principles, and the results of the study suggest a number of interesting predictions to be tested. We needed the re-construction to test first whether the acquisitional principles, and the descriptions on which they are based, are the *relevant* ones.

This last sentence is important. One cannot simply test categories and rules of the language to be learned. We have on occasion made reference to the "closeness fallacy" in cases where an utterance produced bore a superficial resemblance to a TL form, whereas it was in fact organised along different principles.¹⁴

The homogeneous "end state" hypothesised by some researchers for first language acquisition (represented for our purposes by the grammar of the TLs) is not necessarily the best starting point for adult acquisition studies. It is worth stressing this possibility, as in the current debate on the role, or the lack of a role, in adult language acquisition of Chomsky's "Universal Grammar" a crucial question both for proponents *and* adversaries seems to be:

Why do adults *not* attain the end-state of primary language acquisition?

and global answers are suggested. Bley-Vroman (1989:41), for example, explores the possibilities that "the innate system that guides child language acquisition no longer operates in foreign language learning (or, more weakly, that its operation is partial and imperfect)."

We have been asking a different question (and a much more interesting one, in our opinion), namely:

Why do adults attain the state that they do?

and the partial answers we have been able to provide have two aspects worth underlining. This state is relevant for the adult (after all, it is the state that he reaches!) and it *has* to be defined as the logical outcome of a motivated process.

So with the caveats (7.6.2) about our lack of control over the motivations of our informants and over the input they received firmly in mind, our conclusion is that there can be identified a *communicative logic* in adult language acquisition which leads the learner to acquire linguistic means in order minimally to accomplish a discourse task. ¹⁵ The constitution of the basic variety discussed in 7.3 clearly has to do with the characteristics of the (narrative) discourse the learner was attempting in his L2. However, some variation was noted (in 7.5) which was attributed to the learners' perception of SL-TL distance.

Further development was observed to result in the acquisition of more TL-specific rules and items. The reason for this development beyond the basic variety is that the latter has communicative limitations, i.e., that in certain specifiable contexts, its constraints come into competition, provoking some learners to scan the input for the means to overcome the competition. We may conclude therefore that:

(i) the intake of new TL rules or items cannot be seen as mere addition. This intake is context dependent, and provokes the learner variety gradually to re-form into a new coalition of constraints;

(ii) analysis of the input is more or less facilitated by source language expectations.

Nothing more precise than 'source language expectations' has been proposed in this work to account for how the learner analyses the TL input. This would need another project, where the input is controlled.¹⁶

Rather, reasons were suggested *post hoc* as to *why* a learner would acquire new items or rules. These reasons turned around a highly context-dependent interplay of constraints: considerablec importance had therefore to be attached to the characteristics of the text-type the learner was attempting. Thus the need to characterise different types of language use at a given time is, it is suggested, an *essential* ingredient in the explanation of acquisition.

The interaction between intrinsic and contrastive (SL-TL) factors is then that the latter facilitate acquisition more or less, but structures are not acquired *simply* because the SL and TL are close in some respect: SL-TL comparisons will only get you some of the way - they are mediated by other factors, such as meaning and context.

The discussion of this interaction can be contrasted with the current, more predictive use of structural considerations which forms part of the "UG-debate" and which reflects the old debate between traditional contrastive analysis and error analysis. The former was predictive: those areas of structural difference between source and target languages represent acquisitional problems. The latter was explanatory *post hoc:* the learner's errors have come about through a false hypothesis based on his source language, or from an overgeneralisation of a target language regularity. It is suggested in the light of the results of this study that reconstructions are a necessary first step. Whether 'textual' or 'intuitional' data are being used, one is confronted with the *results* of hypotheses from the individual's different knowledge sources, and these hypotheses need to be reconstructed by the analyst. Predictions based on structural statements suffer from two inherent drawbacks when one's aim is to attempt to explain the path that the acquisition *process* took, and at what point it ended:

- they are categorial
- they are de-contextualised.

A structural prediction therefore ignores two probably defining attributes of adult language acquisition: it is context-dependent and cumulative. As has been stressed throughout this study, the acquisition of some item or rule has ramifications throughout the learner variety.

The acquisition by a learner of an item or rule is furthermore not a *sui* generis development; rather, it is the fact that this machinery allows for the

better organisation of some aspect of *language in use* which provokes the learner to scan the input for the means to achieve this organisation.

hoc scripsimus MCMXC

Notes

- 1. Parts of this chapter are based on Perdue (1990a).
- 2. There is a remarkable similarity between these relationships and the "basic meanings" realised by the most frequent verbs in 11 European languages studied by Viberg (ms): Je, have, can/must, go/come, give/take, make, say, see, know, want.
- 3. In the Field Manual (Perdue, ed., 1984b) we hypothesised a 3-place system for nominal utterance organisation: (place 1) (place 2) place 3, with the following informal characterisation. Optional place 1 accepted contextualising adverbials of time, place or modality; place 2, filled by "given" information was optional as such information could be left implicit; place 3 accepted new information. These intuitions have become rather more systematic (for narrative discourse at least) as the topic component of utterances corresponds to places 1 and 2, and the focus, to place 3.
- 4. It is probably not coincidental, however, that verbs which violate the control constraint S (receive a blow) or S2 (take from somebody) do not appear until the later stages, since they cannot simply be fed into a V-slot. See below, 7.7.
- 5. Where 0 would have referred adequately, a pronoun was only used in one context: to mark the change from one chain of action sequences to the next, when both involve the same central protagonist (functionally motivated overspecification).
- 6. The problem is further compounded by the fact that learners are reporting accusations and have either to revert to direct quotation or to attempt the necessary shifts for indirect speech. Lack of space prevents us doing more than merely mentioning this complication.
- 7. The image is from D. Slobin (personal communication).
- 8. Carroll (1990:1016) observes that in Italian, English and German native speaker instructions, the relatum + theme order *does* obtain in this context, although other orders are theoretically possible.
- 9. In similar vein, Huebner (1983) observes that his subject's move away from a topic-comment organisation of utterances corresponds with the development of articles to give the information status of NPs.
- 10. Other studies (e.g. Klein and Rieck 1982) suggest that second person pronoun development aligns, naturally, with that of first person. The learners had little opportunity for second person use in the data examined here.

- 11. Nor is the correspondence observed with Jorge's development in negation informative: a similar correspondence would doubtless have been observed if Hilles had correlated Jorge's pro-drop development with his pronunciation of English plural nouns.
- 12. Madan, Ravinder, Andrea, Tino, Ayshe, Çevdet, Mahmut, Ergün, Mohamed, Fatima, Zahra, Abdelmalek, Berta.
- 13. Here, our findings are in accordance with those of Sato's recent longitudinal study (1990:122).
- 14. There are indications (e.g. in Perdue 1980) that what is the case for production data is also true for intuitional data: learners give TL-speaker-like judgements for the "wrong" syntactic reasons.
- 15. Huebner (1989:139) states this idea as follows: "discourse structure influences syntactic change". Sato (1990:123) states the idea in a more circumspect fashion: "conversational interaction selectively facilitates IL development".
- 16. Such a project would also provide the circumstances necessary to test the proposed main factor determining the acquisitional sequences found in ZISA's longitudinal study (Clahsen 1984) the degree of processing capacity required by the learner to analyse and re-use the relevant structures: a factor which is both plausible, and complementary to those examined in this work.