Learning a Foreign Language in a Natural Acquisition Context without Instruction.

The early stages of second language learning in everyday communication, without formal instruction, are examined. It is proposed that in such a situation, the learner draws on: (1) second language input; (2) innate human capacity for learning languages; and (3) native language knowledge. The linguist's typical approach to investigating language learning through observation in these contexts might involve noting patterns and considering several hypotheses about learning processes, but this is not observation of what really happens. A 6-year project on second language acquisition by adult immigrants focusing on relationships in specific native/target language combinations illustrates that researchers should look more closely at how the learner approaches the target language, not how theoretical linguists describe the process. In this study, a small pilot investigation on the ways in which individuals retold the plot of a film was used to develop methods and observations. Subsequently, information gathered on the constraints determining utterance structure was used in a larger study. Analysis focused on six domains: expression of time; expression of space; development of utterance structure; lexical growth; feedback in native-non-native interaction; and reasons for misunderstanding. Individual variation in learning can give insight into learning stage and native language characteristics. A 29-item bibliography is included. (MSE)
LEARNING A FOREIGN LANGUAGE IN A NATURAL ACQUISITION CONTEXT WITHOUT INSTRUCTION

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In this paper I will, in a somewhat informal way, try to characterise the initial stages of the developmental route which L2 learners follow when they acquire the target language in a "natural" context without formal instruction. To set the scene for this paper, I will start with a little story. I recently had a conversation with a colleague of mine at the Max Planck Institute for Psycholinguistics at Nijmegen. He had just returned from Turkey, where he had been teaching at the University of Ankara for about four weeks. It had been quite an experience, he said, not only at school, but also, and much more so, outside the university, out in the streets, in town. He said that he had felt lost, completely so, for the first time in his life. He did not understand a word of what was being said around him, nor did anyone understand a word of what he was saying. That was an experience he had never had before. He had been in foreign countries before, but most people spoke some English or German or French or some other language he was not totally unfamiliar with. This was the first time he could not make himself understood at all: he found himself in a kind of social vacuum. My colleague experienced this situation for only a few weeks, but for a lot of people, e.g. the Turks from Anatolia coming to the Netherlands or Germany, this situation is not an uncommon one: generally they will not understand a word of the language spoken around them, nor can they express themselves in the language of the host country. This really is a threatening situation and it should be added that, generally speaking, the natives of the host countries are much less friendly to the Turks than the Turks would be to them in Ankara.

One of the things that help a person in such a situation is the remarkable capacity we have for learning a language, for picking up, in the sound stream, some elements of the information which permanently impinges on our ears. It is precisely this topic - how people get to learn the target language in such situations - that is addressed in the present paper.

In doing so, the L2 learner can draw on three things:
1. the L2 input with which he is continually confronted;
2. the innate, genetically given capacity which humans possess for learning languages;
3. his knowledge of his native language.
These three things together make it possible for him to acquire the target
language and to become accommodated to some extent. This kind of
second language acquisition is very different from the kind of second
language learning which takes place in the classroom. What this paper is
concerned about, therefore, is second language acquisition taking place via
everyday communication.

How does language acquisition proceed in such a situation? Take the
case of an Italian learner of English we studied recently. After some four
or five months he had picked up nouns like ‘Mary’, ‘Charlie’, ‘man’,
’girl’, ‘bread’, plus some thirty of forty other nouns. He had also picked up
a couple of verbs, e.g. ‘see’, ‘come’, ‘laugh’, and some twenty more. And
finally, he had acquired some function words like ‘he’ and ‘this’ and
some adverbials like ‘then’, ‘there’, and ‘often’.

Table 1: Elementary repertoire of an L2 learner after 4 or 5 months

<table>
<thead>
<tr>
<th>Nouns</th>
<th>Verbs</th>
<th>Pronouns</th>
<th>‘Particles’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary, Charlie, man, girl, car, bread,...</td>
<td>see, come, laugh, take, hit, walk,...</td>
<td>he, that,...</td>
<td>then, there, often, in, and, not,...</td>
</tr>
</tbody>
</table>
+------------------------+------------------+-----------+-------------|
| + 30-40 other Ns (or NPs)| + 20 other Vs    | + 5 or 6 other pronouns | + 10 other ‘particles’ |

At that point, there was no inflection whatsoever in the L2 speech of our
learner. This elementary repertoire is what he had picked up after four or
five months of L2 acquisition. Of course, a language does not consist of
single words. Somehow larger utterances have to be understood and
produced and the important question is how do L2 acquirers go about
putting together the words they have picked up?

Imagine, now, you are in the kind of situation I have described
above and you have the same elementary repertoire at your disposal as the real
learner in our study. How would you go about putting these words
together, if you want to express something simple like “Charlie stole a
bread”? Remember you have acquired the words you need to express the
content of that utterance. You have the words ‘Charlie’, ‘steal’ and
’bread’, but you have not yet acquired inflection. How do you put these
words together, if you want the addressee to understand your message?

I am convinced that you would very likely say something like ‘Charlie
steal bread’. Why would you construct your sentence in this way and not
in another way? This is because you have a very clear idea that the subject
comes first, the object at the end and the verb in the middle. Now, this
‘rule’ does not hold for all languages; it does not hold for Turkish, for
example. So, why don’t you say “Charlie bread steal”? These are the kind
of questions we want to be able to answer.

When you start analysing data like the above, you would probably
begin with considering certain hypotheses on how to proceed in principle.
Here is a list of a number of ‘possible’ hypotheses:
Table 2: Eight hypotheses on early L2 sentence construction

"Charlie stole a bread"

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Shortest unit comes first</td>
</tr>
<tr>
<td>A2</td>
<td>Verb comes first</td>
</tr>
<tr>
<td>A3</td>
<td>Morphologically unmarked NP ('nominative') comes first</td>
</tr>
<tr>
<td>B1</td>
<td>Animate entities are named first</td>
</tr>
<tr>
<td>B2</td>
<td>Agents come first</td>
</tr>
<tr>
<td>C1</td>
<td>An entity referred to before comes first ('maintenance before introduction')</td>
</tr>
<tr>
<td>C2</td>
<td>Entity which is most important for communication comes first</td>
</tr>
<tr>
<td>C3</td>
<td>Entity which the speaker thinks is best known to the listener comes first ('from known to unknown')</td>
</tr>
</tbody>
</table>

For example, you might follow a very clear and simple maxim like A1: "The shortest unit comes first". This is a very clear principle indeed, but which everyone would agree is absolute nonsense. You can apply it, but this, we think, is not the way in which languages work. The funny thing is, actually, that it does hold, but possibly as a consequence of other factors: pronouns are generally very short and if pronouns occur, they are generally put in initial position at first. But nobody would assume that pronouns typically occur in initial positions because they are short: one would assume there to be functional reasons for this position. So, the maxim "shortest unit comes first" can be dismissed as a serious candidate.

Next, consider a principle like A2: "Verb comes first". Such a rule would not do for German, Dutch or English, but might do for other languages. Note that in order to follow this rule, you must not only know the meaning of the verb, but also that the word in initial position is a verb; and that is not a trivial issue, depending on your native language.

Another possibility is to follow A3: "Morphologically unmarked noun phrase (nominative) comes first". This is somewhat trickier; such a rule presupposes that a) you know what a nominative in the language concerned is; b) that you yourself have mastered the morphological system of that language at least to some extent; and c) that there is a distinction between nominative and accusative noun phrases, which is not the case in the example from the learner given above.

We now come to some principles of a different type. According to one such principle, B1, "Animate entities are named first". This again is a 'possible' principle which you could apply with ease, because it can be assumed that you will be able to distinguish between animate and inanimate entities, and the principle would work in "Charlie stole a bread". If you have to decide between "Charlie" and "bread" (this criterion does not
apply to "steal"), you would say 'Charlie is animate and comes first' and this decision would be correct. So the principle works, but it does not work for all constructions. It might be the case that there are two animate entities or that none of the entities is animate. According to another principle, B2, "Agents come first". This principle would also apply for the example sentence given above, but not necessarily for all sentences (German is a case in point here).

Finally, I would like to present some 'possible' principles of yet another kind. One of them is C1: "An entity referred to before comes first", or, in other words, maintenance comes before introduction. So, if one decides on a new entity to talk about, one would tend to place it at the end. Another principle of this kind is C2: "Entity which is most important for communication comes first" (or possibly last). Again, this seems to be a plausible principle in many cases, but it presupposes that you are able to make out what the most important entity is. The last 'possible' principle I would like to offer for consideration is C3: "Entity which speaker thinks is best known to the listener comes first". This is again a principle which posits that "known" precedes "unknown". This principle, which was advanced in general terms by Behaghel as early as around 1930, is a very general principle which has an essential role to play in nearly all grammars.

What I have demonstrated just now is not what really happens. It is something you might conceivably do in a situation like the one described above and it might be what a researcher studying L2 acquisition in such situations might assume would happen. There are many more principles or maxims we could think of, but the ones discussed here suffice to illustrate my point.

What do you do as a researcher who wants to know how L2 learners put their words together, or, to put it differently, construct their syntax? I believe one should not speculate, but adhere to a maxim which the philosopher Wittgenstein once clearly stated, which runs as follows: "Denk nicht, sondern schau". A linguist interpreting this maxim would go to his books and look into the linguistic literature. It's my firm conviction that you should not look into the speculations of linguists on this issue. They do not know. What you have to do, really, is to look at the facts. You have to study the situations in which learners have to acquire and use the target language, and that is exactly what we did.

Before presenting some results, I will give some information on the aims and design of the European Science Foundation project on second language acquisition by adult immigrants. This was a six-year project in which five different countries participated. The project coordination took place at the Max Planck Institute at Nijmegen, but the actual work was done at local centres, in Tilburg, Heidelberg, London, Gothenburg, Paris, and Aix-en-Provence. What we were particularly interested in, was the combination of various source languages and target languages, or, in other words, native languages and (second) languages to be learned, in order to find out in what way the various structures of these languages
influenced the acquisition of target language syntax. The design of the project was something like this:

Figure 1: Design of the ESF project

Our subjects were all adult immigrants (mainly unskilled workers), aged between 18 and 40 years at time of arrival. In England we studied how Punjabi- and Italian-speaking immigrants acquired English through everyday communication; in Germany we studied how people from Italy and Turkey learned German; in the Netherlands we studied how learners from Turkey and Morocco learned Dutch; in France we looked at the acquisition of French by native speakers of Arabic and Spanish; and, finally, in Sweden we studied how Spanish and Finnish-speakers learned Swedish. The study was a longitudinal one with some cross-sectional components and we concentrated our research on four learners, adults aged between about 20 and 30, for each group. So we had four Punjabi learners of English, four Italians learning English, etc.. A wealth of different data collection techniques was used. The basis for our work was provided by free conversation data: we talked to subjects at regular six-week intervals. We also collected personal narrative data by asking subjects to tell about certain incidents in their lives, such as conflict situations. Another technique we used was role play: we put our subjects in a certain situation in which they had to enact a particular role. A fourth technique was film retelling: we showed our subjects a brief sketch from a Charlie Chaplin movie and we asked them to retell what was shown to them. Still another technique was what one might call self-confrontation: we had recorded our subjects' speech and we played the recording back to them and asked them to comment on it in their native language. We asked them what they had been thinking and what they had really meant to say.

Second language acquisition as a very complex and comprehensive process, with a lot of different things going on at the same time.

We decided to focus our analysis on the following six domains:

1. The expression of time.
2. The expression of space.
3. The development of utterance structure.
4. Lexical growth.
5. Feedback in native-non native interaction
6. Reasons for misunderstanding.
The real study was done in two steps. First, we did a small pilot experiment and then we applied the methods and observations developed to all the learners in our study. Here we are mainly concerned with the data that we collected with the film retelling technique. What we wanted to find out was how people put their words together as they retell the plot of the movie. We had a Readers Digest version of 'Modern Times', which was cut back to about 15 minutes. Then the set-up was as follows: the informant, the learner in this case, and another person, a native speaker of the language, watched the movie together for about 5 minutes, then the native speaker went out and the informant watched the rest to the end. He then had to retell what happened in the subsequent part. The idea was to create something like a common background, such that the main protagonists were known and the informant knew that the listener knew certain things. The main reason for using film retelling rather than normal narrative was that there had to be some sort of control on what our subjects wanted to say in a given case. This is much easier if there is some kind of common background: usually we knew what they wanted to say in a given utterance. This gives a much better handle for the analysis of the learner's language.

In the pilot study we transcribed the data of three learners and looked at the utterances to see what they did and how they proceeded. We had to face all sorts of problems when analyzing the data. Very often you cannot decide right away which principle the learner follows. As you go on, unclear cases disappear and you get a converging picture. The outcomes of the pilot study were that, basically, there are three types of constraints which determine utterance structure.

First, there are phrasal constraints, i.e. syntactic constraints in the narrow sense of the term, which you can formulate in terms of phrase structure and syntactic categories like noun, verb or noun phrase, etc. Utterances typically consisted of one (uninflected) verb or copula and one or two one noun phrases. In the former case, there are two possibilities: the noun may precede or follow the verb. We found cases of both, but the second one is much rarer and the noun phrases which appear in that position are, moreover, different from noun phrases in initial position. It is more difficult when there are two NP's. Then a very general principle holds, viz. that the verb is always in between, which is surprising for the Turkish learners. Again the NP's which appear in initial position and final position are a bit different: all NP's which show up after V can also be in first position, but not vice versa. In constructions with a copula, there is an NP first and an adjective or an adverb in final position, or vice versa. I should add that all these patterns can be followed or preceded by an adverbial. We found some more constraints, but this is the gist of what can be said about the learners' utterances in phrasal terms.

The second type of constraint is semantic. We found one perfectly consistent principle, which determines the speaker's choice. It can be stated in terms of role properties: controller first. The definition of controller is based on control asymmetry; it reflects the degree to which a referent is or intends to be in control of other referents. For example, in
the sentence 'Charlie stole the bread', which would be rendered 'Charlie steal bread' by most learners, "Charlie" would be far more in control of the situation than the other referent. For practical purposes controllers can mostly be equated with agent. There is a reason, however, why we do not call it agent: a classification into agent, patient, experiencer etc. is based on a kind of notional categorisation, rather than on a simple asymmetry. Such an asymmetry can be more or less clear. It is very clear in 'Charlie steal bread', whereas in 'Charlie loves girl', it is much less clear who is in control, and in fact, we note that our learners really get into trouble in such cases.

The third type of constraints are pragmatic ones, i.e. they are stateable in terms of 'given/new', communicative importance, and the like. And the main principle we find here is 'focus last'. (There is also a principle that elements already known tend to appear in initial position.) Let me briefly explain what I mean by focus. We can imagine that any declarative utterance answers an either explicit or implicit question and, since it might be implicit, I will call it a 'quaestio', the old Latin term. But the question may also be answered by a series of utterances. Suppose your wife comes in and she looks dishevelled, you ask 'what happened?' What follows normally is a series of utterances, a narrative, and this narrative in its entirety serves to answer one key question, the quaestio, which may or may not be explicit. The quaestio of a narrative is what happened to the protagonist at a certain time. The answer is a series of utterances and each utterance jumps to a new time. Exactly this happens in the case of the Charlie Chaplin retelling: the informant tells what happened to Charlie at time 1, 2, 3, etc.. This sequence is determined by the natural order principle, which has been described by authors such as Labov or Clark. The sequence of utterances which retell the film can be interrupted by other utterances which are directly related to the quaestio, but present supportive material. In the literature this is called background material; the foreground is the sequence of utterances which tell about the subsequent sub-events and answer the question. This can be interrupted by utterances such as 'This was last year' or 'That was terrible' or some background information. The quaestio imposes a number of constraints on the topic-focus structure of the foreground clauses and you can imagine that such foreground clauses assign a topic. The protagonist and the time described are the topic and the event as such or the next incident is focussed. That is why in all utterances the focus is on the verb or the last phrase, because they present the new event, the protagonist coming first. This, however, is not always the case. In a descriptive text the quaestio may not be 'what happens next?', but 'what does it look like?', and this leads to a different quaestio and topic-focus assignment and, accordingly, to a different utterance structure.

You can now generalize the findings to other types of discourse. Phrasal order is not the same, but we still can say that focus comes last, because the focus is different in all these cases. Within narratives the word order may be very different for background and foreground clauses. Foreground clauses answer the question of what happened next to the protagonist, the
focus being the new event; background clauses may be of a very different kind. There may be questions like: 'How did I feel then?', and this gives a very different focus, the focus being "How?", expressing the kind of feeling.

Let us return to the pilot study; we got the following picture. There are various types of constraints which determine the utterance structure: phrasal constraints, semantic constraints and pragmatic constraints. These interact in a certain way and, as we observed, they often lead to a relatively stable system, to a fossilized system of the language of foreign learners, which does not necessarily develop any further. The reason it fossilizes is that it satisfies the communicative purpose.

In our main study we looked at how learners proceed from this elementary system. This system is characterised, as we have seen, by several principles, which interact and determine the structure of utterances at a given point in time. As development continues, these principles still obtain and exist, but the way in which they interact and the weight the learner attaches to each of these principles change. Whenever the learner has analyzed an item from the input, he adds it to his language repertoire and this leads to a shift of balance. Therefore the whole mechanism of development is a shift of balance between these constraints.

We noted that there is some kind of crystallization point in the development. This point occurs precisely when the principles are at variance, when they conflict. Normally the narrative questio is what happened to a particular person at a particular time. Suppose Charlie is the protagonist and the message that Charlie stole the bread, then the event is focal, and the pragmatic constraint forces you to put the event, the stealing, in final position. At the same time, the semantic principle 'Controller first' places Charlie into initial position. So we end up with this utterance structure: 'Charlie steal bread'. But this is not the only possible topic-focus structure we could have. 'Who stole the bread?' is not a foreground question, but a background one. The controller is in first position, but the focus is all of a sudden on 'Charlie'. The pragmatic constraint then force you to put the stealing of the bread in first position and Charlie last as focus, in contrast to the semantic principle which requires to have the controller in initial position. There is a clash of principles here and our learners get into trouble, for example when it is not the stealing of the bread which is at issue, but WHO did it. In these cases, we get a variety of utterance structures. You could just rely on intonation, or you could apply inversion: 'Dann diese Brot nimmt Charlie', where Charlie is last. Or you could split it up in some way as one of our learners did: 'Charlie hatte das Brot in die Hand gehabt'. What you do here is just describe the result, but it does not give you the same focus structure. So it violates the focus constraint. Funnily enough, about five utterances later the learner, realizing he has made a mistake, does it the other way round: 'Das Brot hatte Charlie in dem Hand gehabt'. In our material we have dozens of examples of this sort. The claim is that these conflict cases constitute some kind of crystallization points where the
system does not work and where the learners have to invent additional constructions and use intonation. All languages have specific means to overcome these problems, and it is their devices which the learner must acquire.

It has also often been noticed that there is a lot of variation in SLA in everyday contact situations: individual learners do not all proceed in the same way. What happens is that learners pick up a certain construction which allows them to rearrange their balance in a certain way. A French learner may pick up the 'C'est'-construction, which is very salient, and this allows the learner to overcome all the topic-focus constraints. But it may also be the case that the learner first picks up some other construction which allows this. That would lead to a different balance, allowing a deviation from the 'control' structure in the sense mentioned above. Therefore, it is relatively natural that you get variation. But there is a more interesting point about variation: in the initial language learner the system is independent of the L1 and the target language. This is not true later on and we find overwhelming evidence that at this point the source language shows its influence. There are languages in which the principle that the focus should go last, is firmly established, and we observe that in conflict cases, in which the condition that makes you apply either the focus principle or another principle, forces you to put it in final position. Then, learners follow different strategies. Turkish learners of German NEVER violate the semantic principle, which is a major principle in their language. On the other hand, Italians do: they seem more free in this respect. Transfer, then, applies in the later stages and not in the initial ones.

My last point is a message. I did not quote common linguistic terms such as universals, etc. nor did I use terms like subject, object, noun phrase, etc.. I think we should look at what the learners do and commit ourselves as little as possible to terminology. We should also look at how learners approach the target language and not so much how theoretic linguists describe them. I believe target languages constitute, in a way, borderline cases of the acquisition process to which the whole development converges. If we do this systematically, we could make a major contribution to linguistic theory rather than borrow from it.