SYNTACTIC INTERFERENCE GERMAN—ENGLISH

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The present paper[1] is intended to challenge the view that native language interference is of very little importance as a source of error in second language learning. It might seem unnecessary to defend a theory of interference, a theory that became well established over thirty years ago. Interference came under severe attack, though, several years ago and recently it has become fashionable to advocate its neglect as a source of error in second language acquisition. This view has, for example, been put forward by Burt/Kiparsky (1972) who do not consider foreign syntax to be a major factor in the learning of English as a second language; or by Dulay/Burt (1973) who note that only 3% of the errors analyzed are caused by interference, while 85% are developmental; or by Dulay/Burt (1974) who report that only 4.7% of their subjects' morpho-syntactic errors can be traced to native language interference, while 87.1% are developmental, caused by learning strategies that are also used in first language acquisition. Studies like these (see the bibliography in Bausch/Kasper 1979) have proposed some form of the identity hypothesis (i.e. the processes of first and second language acquisition are the same) and suggest that second language acquisition involves processes of hypothesis testing and creative construction, comparable to those in first language acquisition. As long as we cannot agree on what is meant by the similarity (Ervin-Tripp 1974) or identity (Dulay/Burt 1976) of first and second language acquisition processes, and as long as it is not clear whether this hypothesis is at all applicable to second language learning in its major form, i.e. in formal instructional settings, I see no reason to give up the transfer hypothesis. Even though I stress the importance of interference in second language learning in instructional settings, this does not imply that I adhere to any strong con-

trastive hypothesis. I concede that the importance of interference as one of the possible sources of error in second language learning was probably overrated in the sixties, but it is precisely this fact that should prevent us from underrating it now. Instead, I claim, following Taylor (1975), Felix (1976) and Flick (1980) that the importance of interference as a possible source of error varies according to various approximative systems (Nemser 1971), or learner languages. Learners will produce more interference-caused-errors at the beginning of the learning process and in the early stages, than in the later stages. The amount of developmental errors will increase with the progress made in second language acquisition and interference will be reduced. It seems reasonable to suppose that the importance of interference also varies with the formality of the setting (from informal to formal, from natural to instructional), subjective and objective learner variables, the teaching material and many other factors. Furthermore, the role of interference is quite different with various structures and at different linguistic levels. It might be less important in the lexicon (Steinbach 1981, but is the source of many possible and persistent errors in phonology. Kettemann/Viereck (1978) and Kalt/Kettemann (1980) have shown that native language interference is an important source of error in second language phonology acquisition, when the native language used in the error analysis represents a real, spoken language and not some hypothetical standard. An analysis based on the actual language variant used has more to offer in terms of descriptive adequacy and possible explanation than an analysis based on an ideal language. Indeed it seems probable that there is very little interference from a language the learner does not actually use very often.

This study will not investigate these variables, which influence interference quantitatively, but an attempt will be made to show that interference is a clear descriptive possibility in error analysis and a sound psycholinguistic hypothesis. I will present a few examples of syntactic errors in various learner languages. I hypothesize that these errors are due to source language interference. I substantiate that claim by relating the actual source language, functioning as a filter, with the target language as input and the learner language production as output. I define syntactic interference-caused-errors as those structural elements in the learner language that are inacceptable in the target language and can be related to the target language input by source language syntactic structures, rules and features. The descriptive apparatus is derived from standard generative — transformational style. I only use shallow or surface structures, because I doubt the value of deep structures in contrastive analysis (cf. Felix 1977) and consider interference to be a performance phenomenon (Hellinger 1980) actively influencing the building and changing of transitional competences. The target language is Standard English as aimed at in the textbooks and as used in a classroom context, and as defined in grammars such as Quirk *et al.* (1972). The source language is a geographical variant of Standard Austrian German, itself a variant of Standard High German. Where the source language deviates syntactically from the standard defined in e.g. Grebe *et al.* (1973), the example is identified as dialectal. The learner language is an approximative system, in certain ways deviant from the target language. It is a system because its elements enter into rule-governed structural relations. It is approximative, because at its successive stages it comes to resemble the target language more closely. It is characterized by its permeability (it allows rules etc. of other languages to operate within it), instability (rules etc. are added etc. as learning and use increase; i.e. it is dynamic), and variability (the order, form, domain etc. of rules etc. is not fixed yet). Although I am working within Selinker's concept of interlanguage (1972), I will only use one of his five processes, language transfer, in the following arguments. This language transfer surfaces in the learner language as target language constituent reordering, restructuring, reclassification, and resubcategorization/respecification in accordance with source language rules, constraints, classes, subcategorizations and feature specifications. The data was obtained from free production of source and learner languages of forty first through fourth year students of English, aged ten to sixteen, from Carinthia, Austria.

1. Constituent reordering

The target language constituents are reordered in the learner language according to the syntactic surface constraints of the source language. Consider the structures in (1).
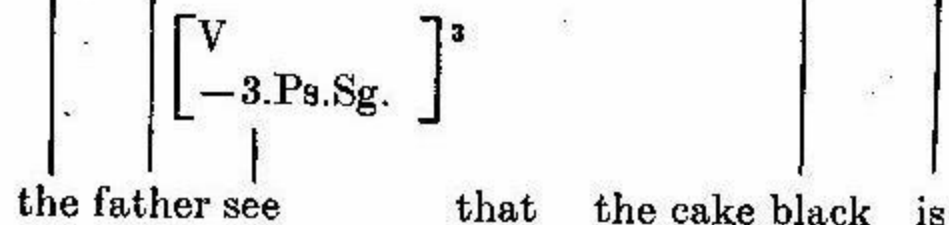
(1) The father see that the cake black is

Target language

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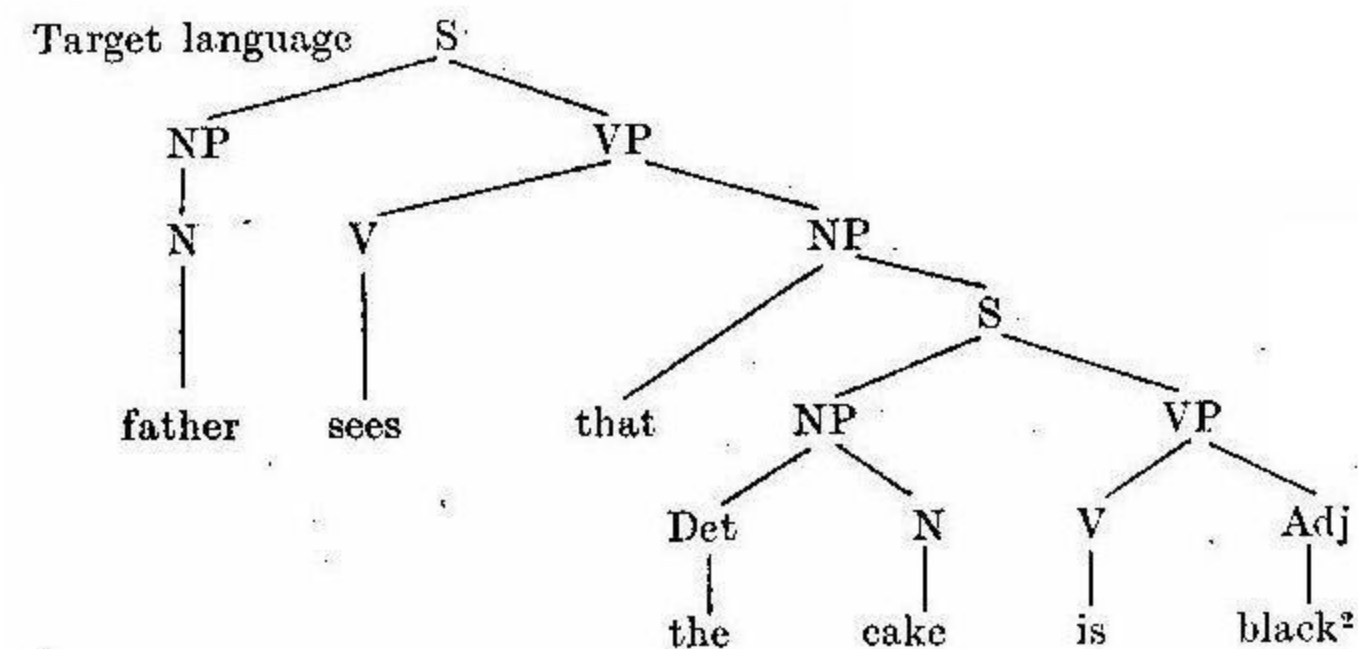
[2] *black = burnt*; note that the target language sentence already is an interference product.

Source language

der Vater sieht daß ... der Kuchen schwarz ist
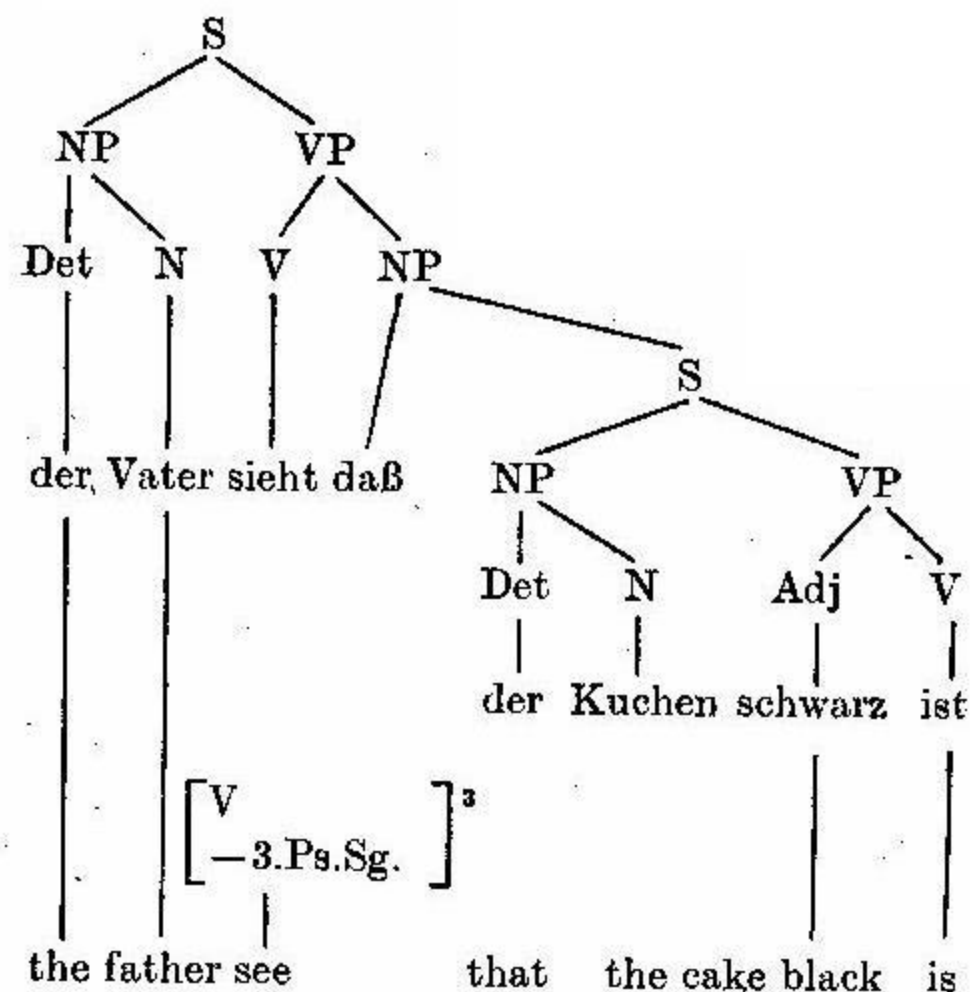
(use of article dialectal

Learner language

$$\begin{bmatrix} V \\ -3.\text{Ps.Sg.} \end{bmatrix}^3$$
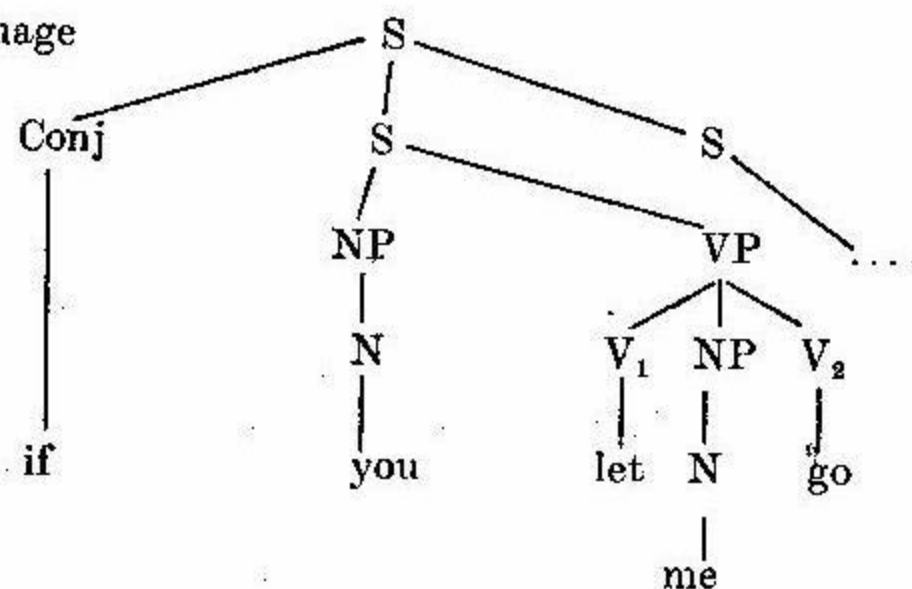
the father see   that   the cake black   is

This is an example of V-postposing in an embedded sentence. The cause of this common word order error is the source language word order, where V is the final constituent of the embedded sentence. The source language postposing rule alters the target language sentence in the learner language output. V-postposing and raising interacts in the next example.
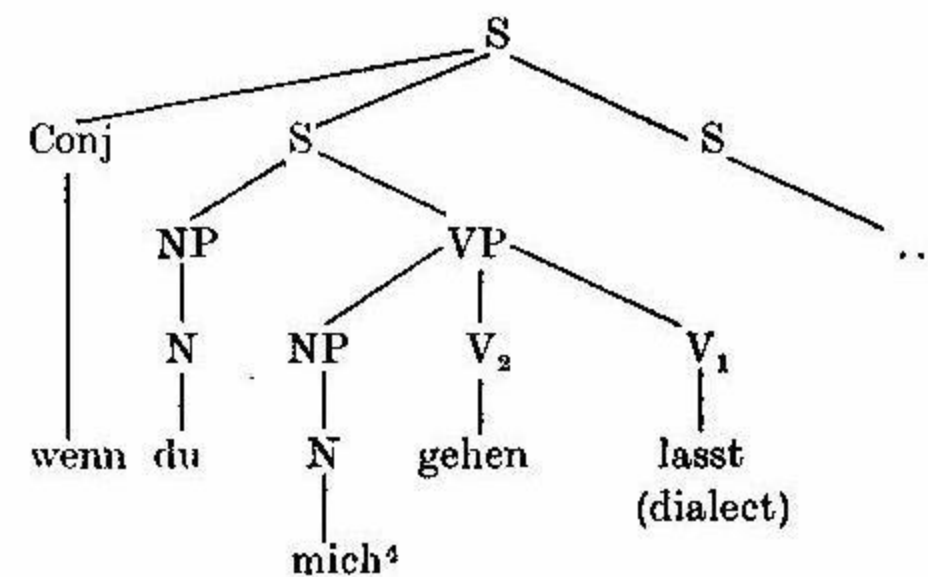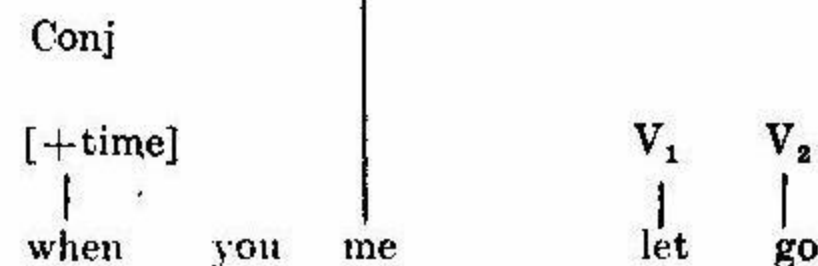
(2) When you me let go

Target language

if   you   let   me   go

Source language

wenn du   mich[4]   gehen   lasst (dialect)

Learner language

Conj

[+time]

when   you   me   let   go

The subject NP of the embedded sentence is raised to object in the matrix sentence of the learner language in the position of the source language, but the target language ordering of V^1 before V^2 is preserved. The source language postposing rule moves the finite Verb behind the direct object, but is too weak additionally to move it behind the infinitive.

The source language V-postposing rule also operates on simple sentences, as (3) shows.

(3) He cannot the cake cat

Target language

he   can   not   eat   the   cake

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[3] This error is due to intralingual overgeneralization, thus a developmental error and will therefore not be treated here.
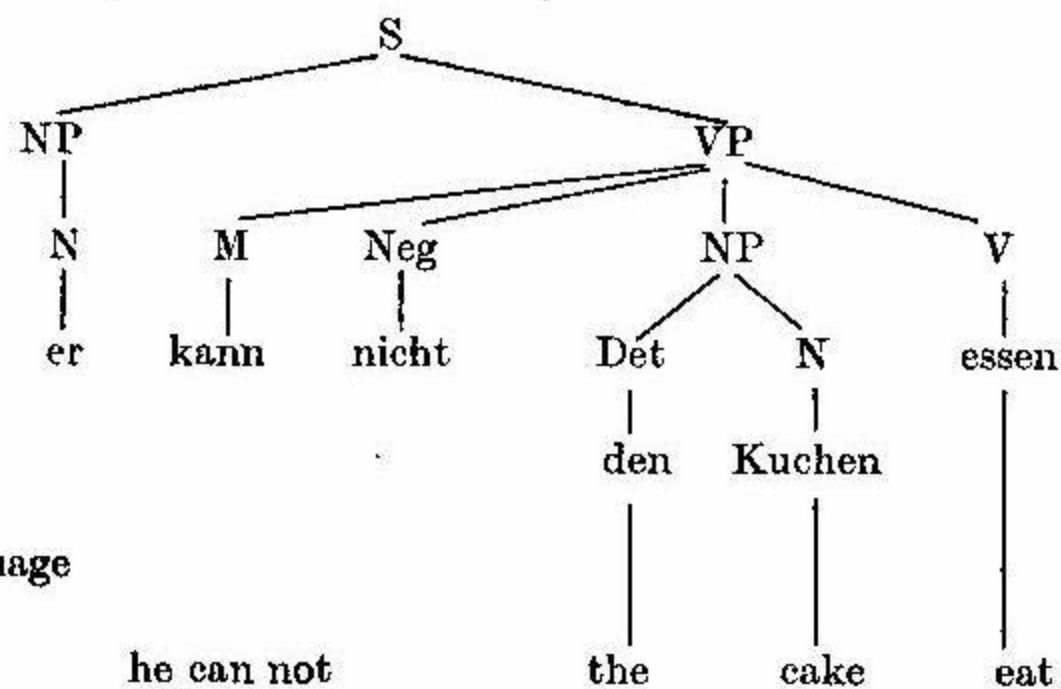
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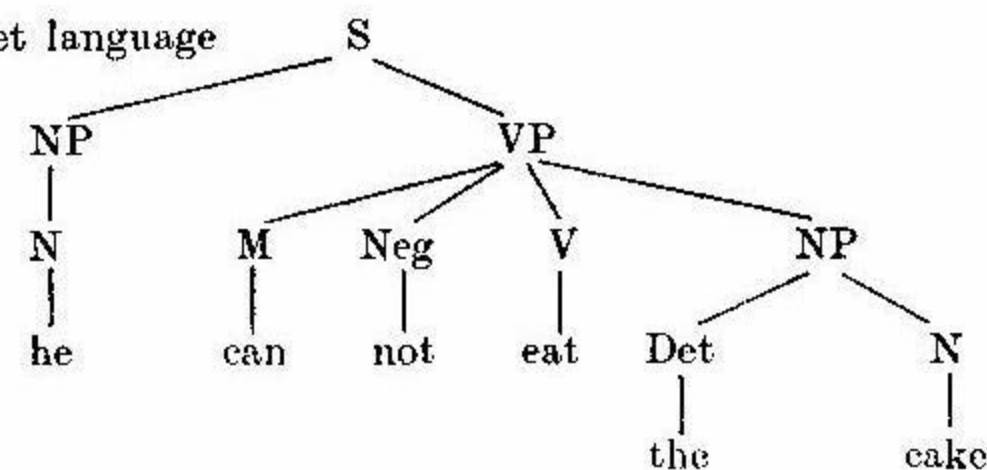
[4] Note the typical mixture of dialect and standard in this sentence. The form of the last verb is dialectal, while the form of the pronoun is standard, resulting in something that could be called "vernacular standard".

Source language

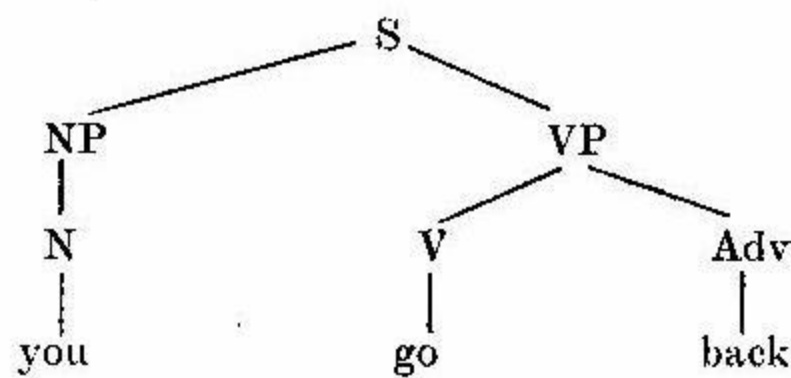Learner language

he can not   the   cake   eat

Again the word order rule of the source language prevails in the learner language. The verb carrying Tense is in second position and the infinitive is moved into sentence-final position. The position of the Neg-particle is scopus-dependent and (in this sentence) does not cause any interference.
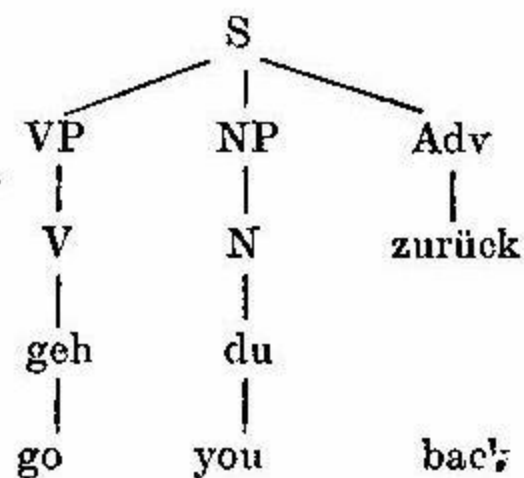
The opposite rule, source language V-preposing in imperatives without subject deletion for example, may lead to interference, too, as in (4).

(4) Go you back!

Target language

Source language

Learner language   go   you   bac';

A target language syntactic surface structure constraint prohibits the separation of copula and adjective in adjective phrase complements. In the source language this constraint does not exist. In the learner language the constraint seems also to be missing as is shown by (5).

(5) The house is outside green

Target language
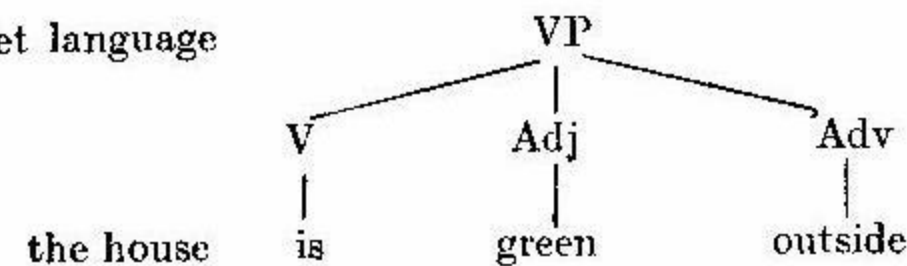
Source language
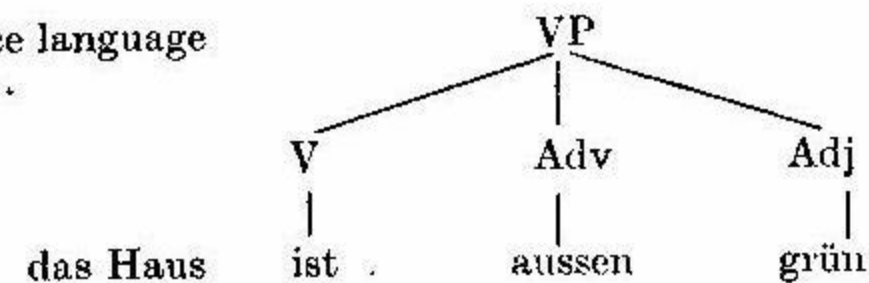
Learner language

the house   is   outside   green

The different status of transformational rules in source and target languages, i.e. whether they are obligatory or optional, may lead to interference, as in (5) above or in (6).

(6) In the sky are many clouds

Target language

Source language

In the source language the subject-NP and the AdvP may be exchanged and an Existential insertion transformation is not obligatory. In the target language AdvP-preposing is only allowed after there-insertion and must be followed obligatorily by subject-NP and Verb inversion. In the learner language the rule for there-insertion is either blocked or considered optional due to source language interference. But even with all the target language rules applied, there is still room for interference, as (7) shows.
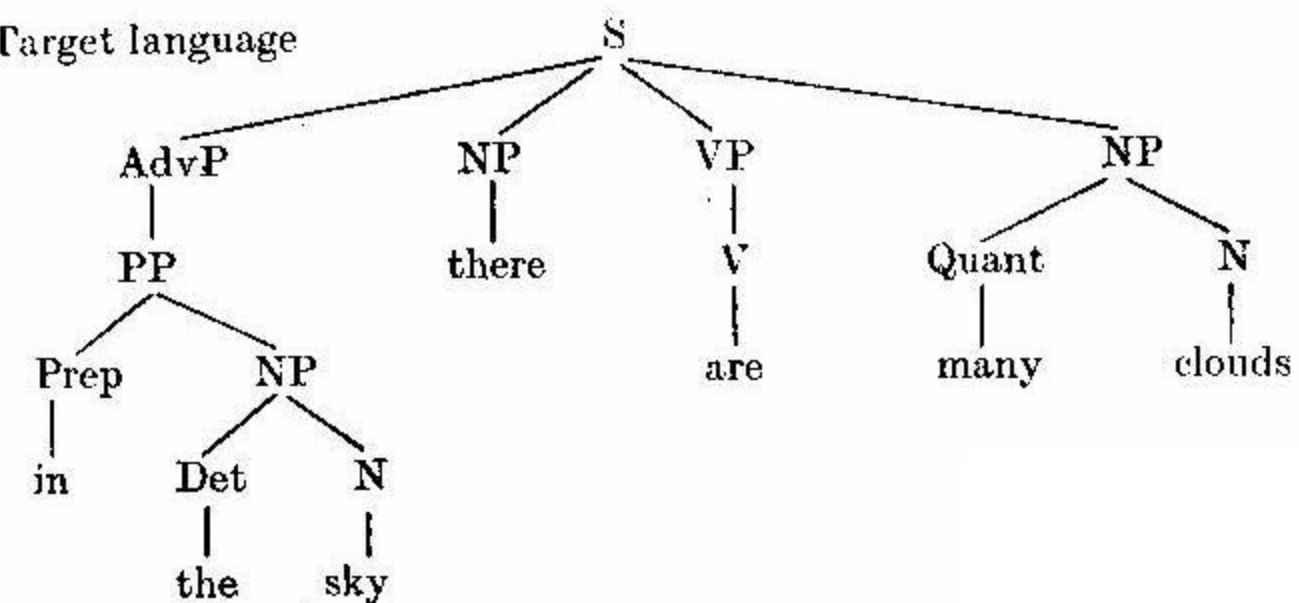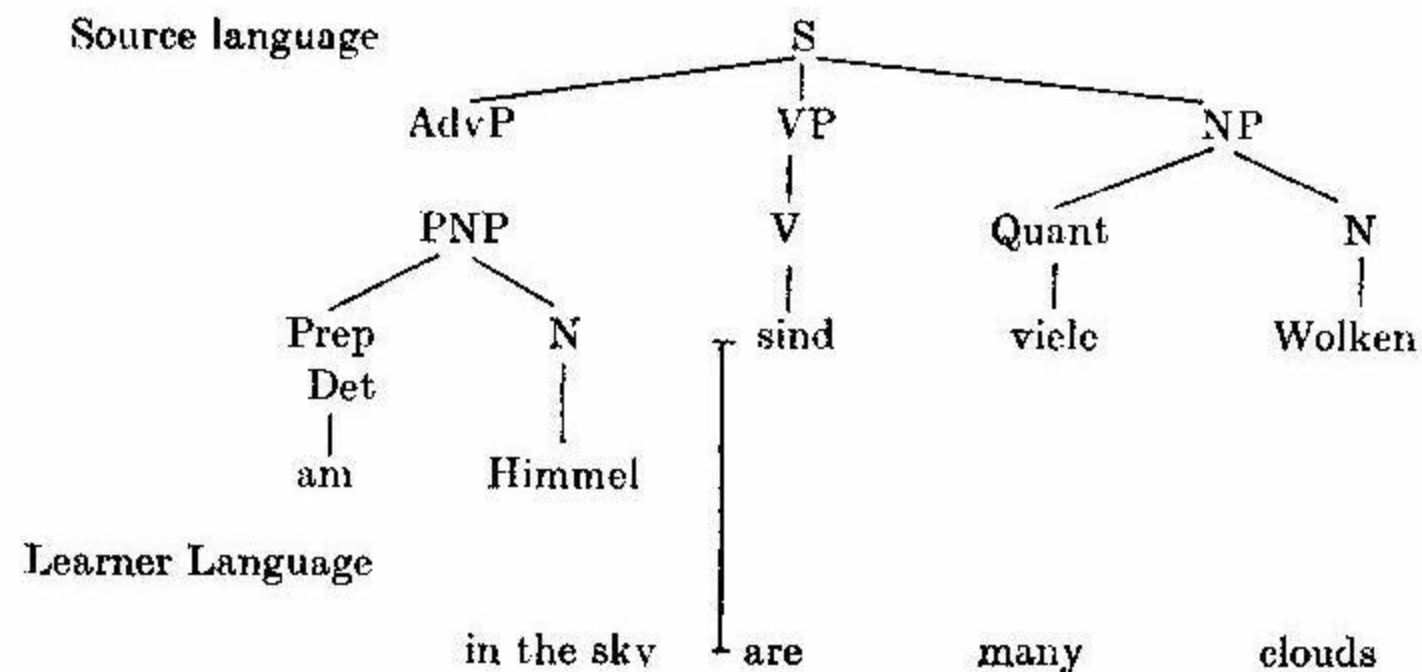
(7) There are everywhere clouds
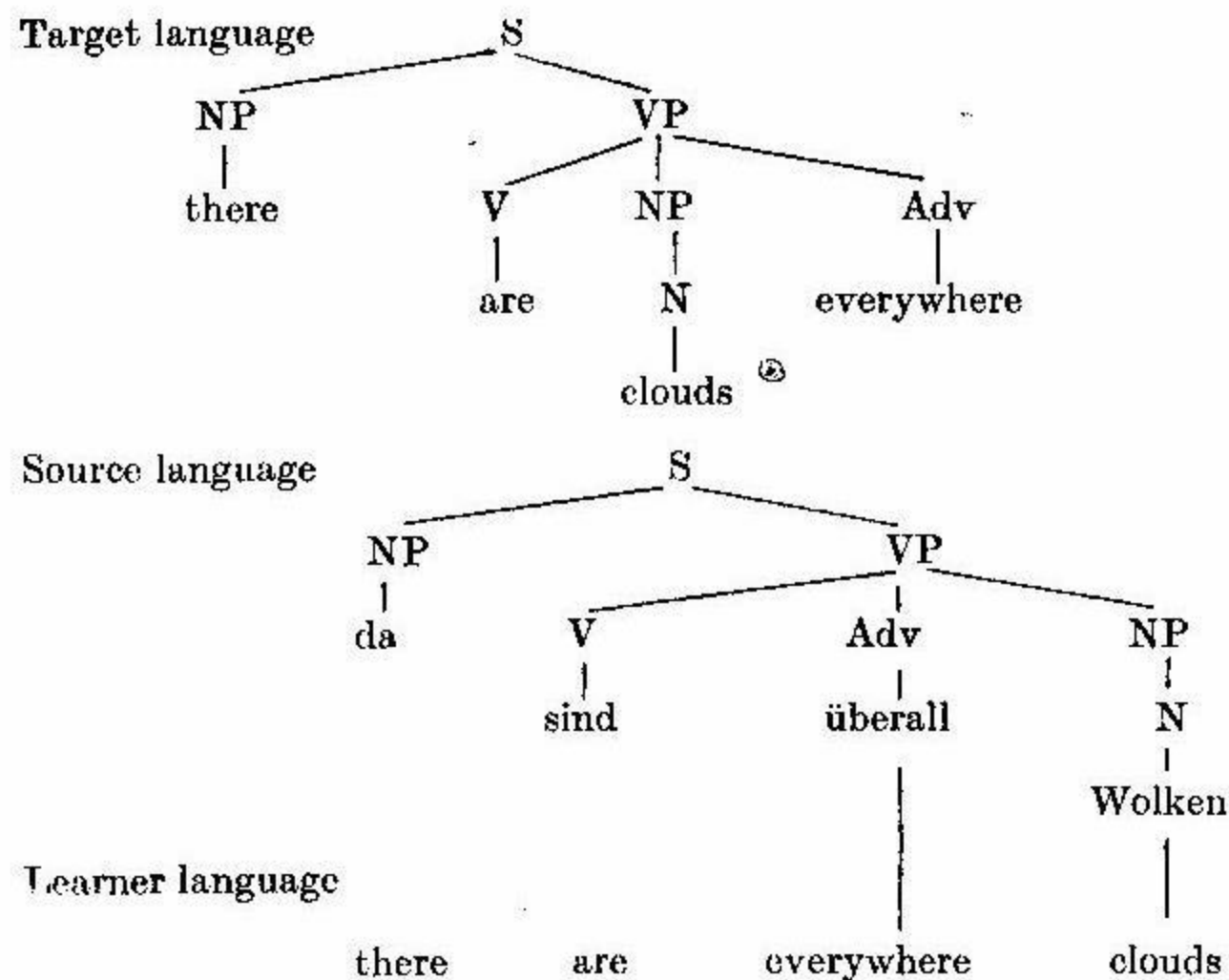
In (7) the VP-final position of the deep structure subject in the source language prevails in the learner language production, resulting in an improper structural change after the application of the subject-verb inversion rule of the target language.

Constituent reordering, then, seems to be a viable process in the learner language. This reordering of target language structures is achieved by applying source language rules and constraints in the learner language.

2. Constituent restructuring

The target language constituents are restructured in the learner language on the basis of source language models. Restructuring differs from reordering in that it alters, expands, contracts, inserts, deletes constituents or parts of constituents, while reordering moves constituents. Consider (8).

(8) I can go walk
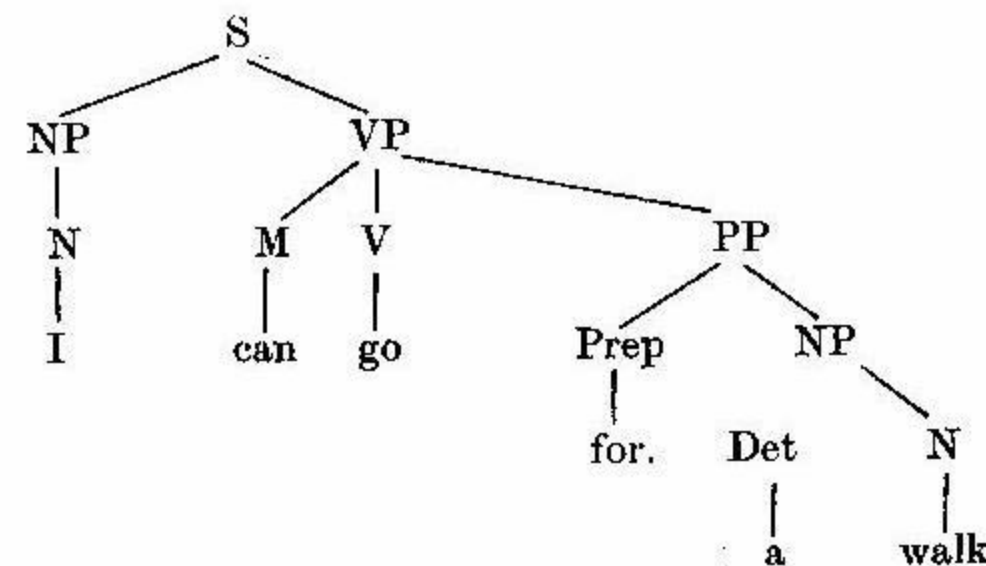
Target language

In this example the source language VP structure is preserved intact in the learner language output. The target language PP-constituent is completely lost. The order of the ultimate constituents is identical to their order in the target language. This shows that reordering and restructuring are two separate processes in the learner language.

In (8) we saw that restructuring may result in deletion, in the following example a reflexive pronoun is added in the learner language:

(9) I clean me my teeth

Target language

```
                 S
        ┌────────┴────────┐
       NP               VP
        │          ┌─────┼──────┐
        N          V            NP
        │          │        ┌───┴───┐
        I        clean     Poss     N
                            │       │
                           my     teeth
```

Source language

```
                 S
        ┌────────┴────────┐
       NP               VP
        │          ┌──────┼──────┬──────┐
        N          V     NP         NP
        │          │      │      ┌───┴───┐
       ich       putze  Refl    Det      N
                          │      │       │
                         mir    die    Zähne
```
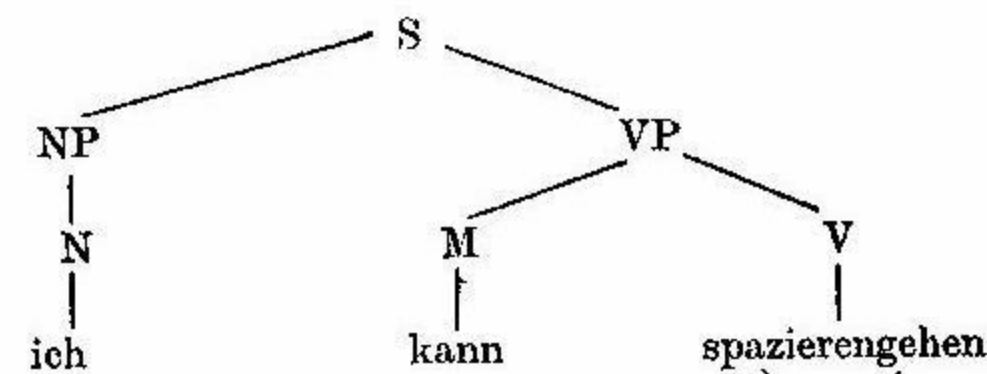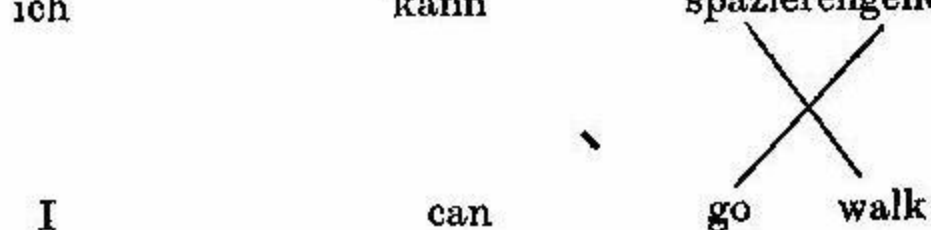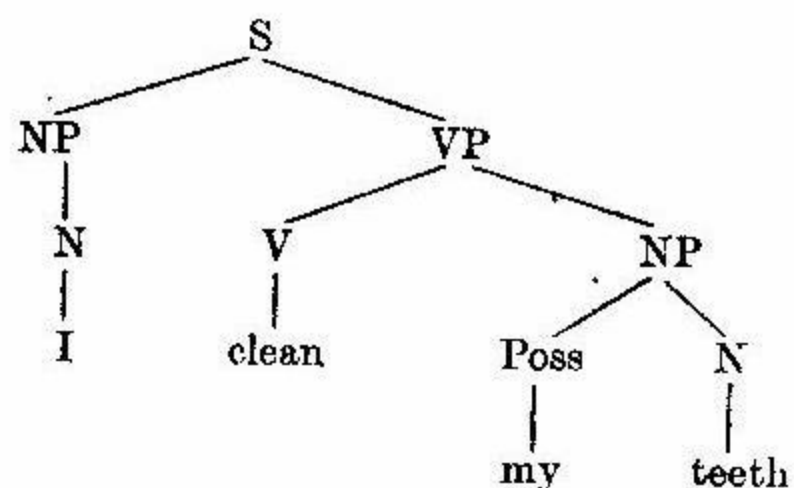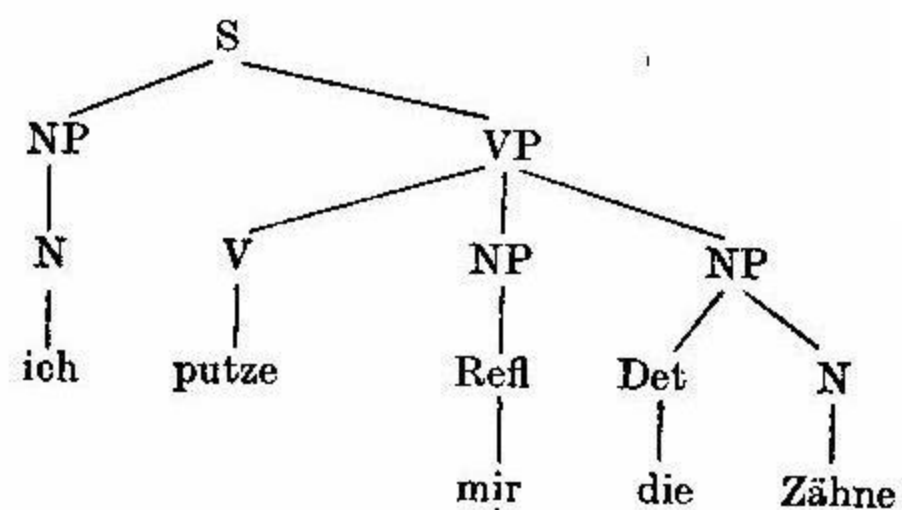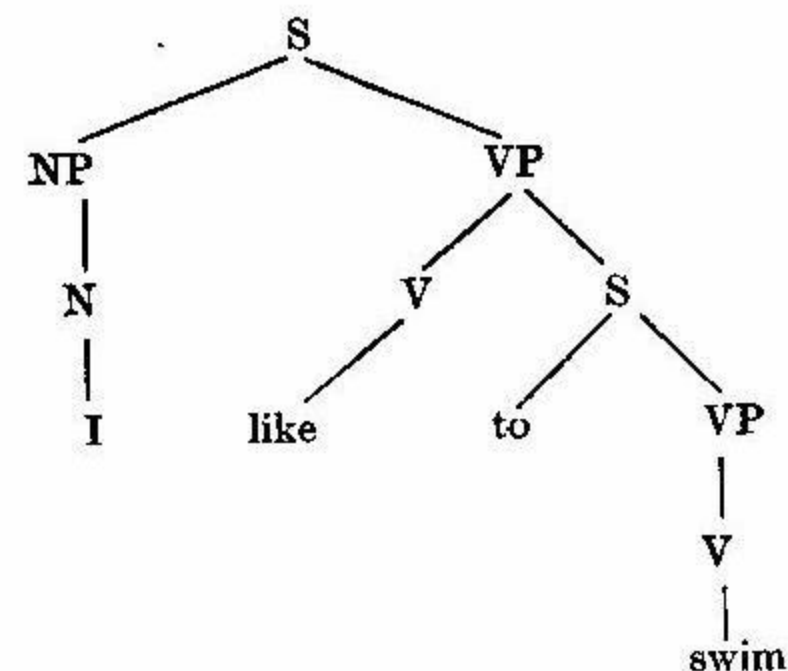
Learner language I   clean   me my   teeth

In the source language the indirect object-NP functions as the indicator of possession in this sentence. In the target language the same function is carried by the Possessive Pronoun determining the direct object-NP. The learner language output is an additive compromise of both structural possibilities. The target language structure was preserved and expanded in order to accomodate the source language structure, too.

In (10) on the other hand, the target language structure is not preserved:

(10) I like swim

Target language

```
                 S
        ┌────────┴────────┐
       NP               VP
        │          ┌──────┴──────┐
        N          V             S
        │          │        ┌────┴────┐
        I        like      to        VP
                                      │
                                      V
                                      │
                                    swim
```

Source language

```
                 S
        ┌────────┴────────┐
       NP               VP
        │          ┌──────┼──────┬──────┐
        N          V     Adv          V
        │          │      │           │
       ich        tu    gern      schwimmen      (dialect)
```
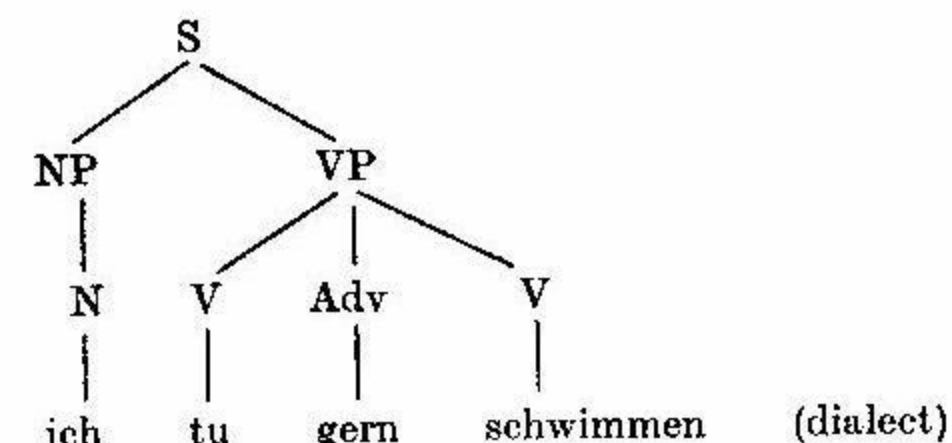
Learner language I   like   swim

In the learner language the infinitive is not properly embedded. The source language V — Adv construction is collapsed into the semantically equivalent target language verb.

(11) For one hour snow falled

```
                              S
              ┌───────────────┼────────────┐
            AdvP             NP           VP
        ┌────┴────┐          │            │
       NP        Adv         N            V
    ┌───┴───┐     │          │            │
  Card      N    ago       snow         fell
    │       │
   one     hour
```

Source language

Learner Language

$$\begin{bmatrix} V \\ +\text{reg. past} \end{bmatrix}^{5}$$

| for | one | hour | ago | snow | falled |
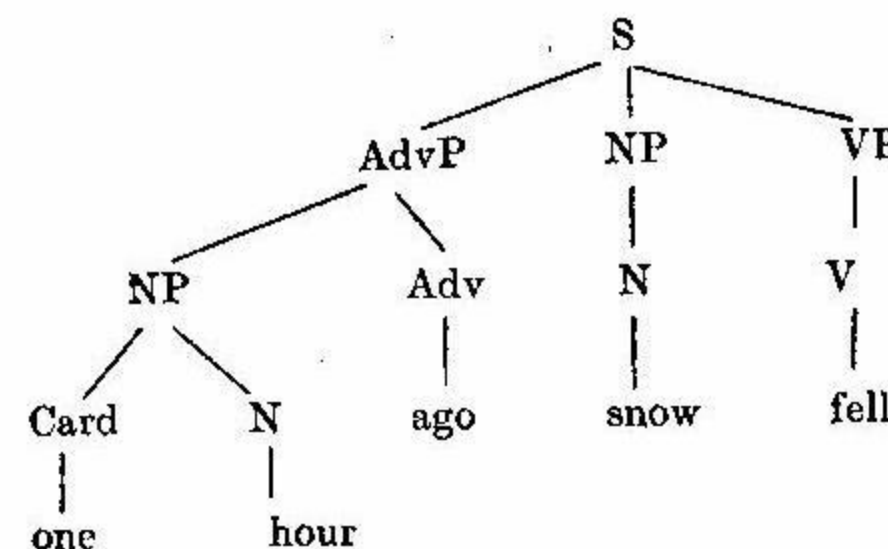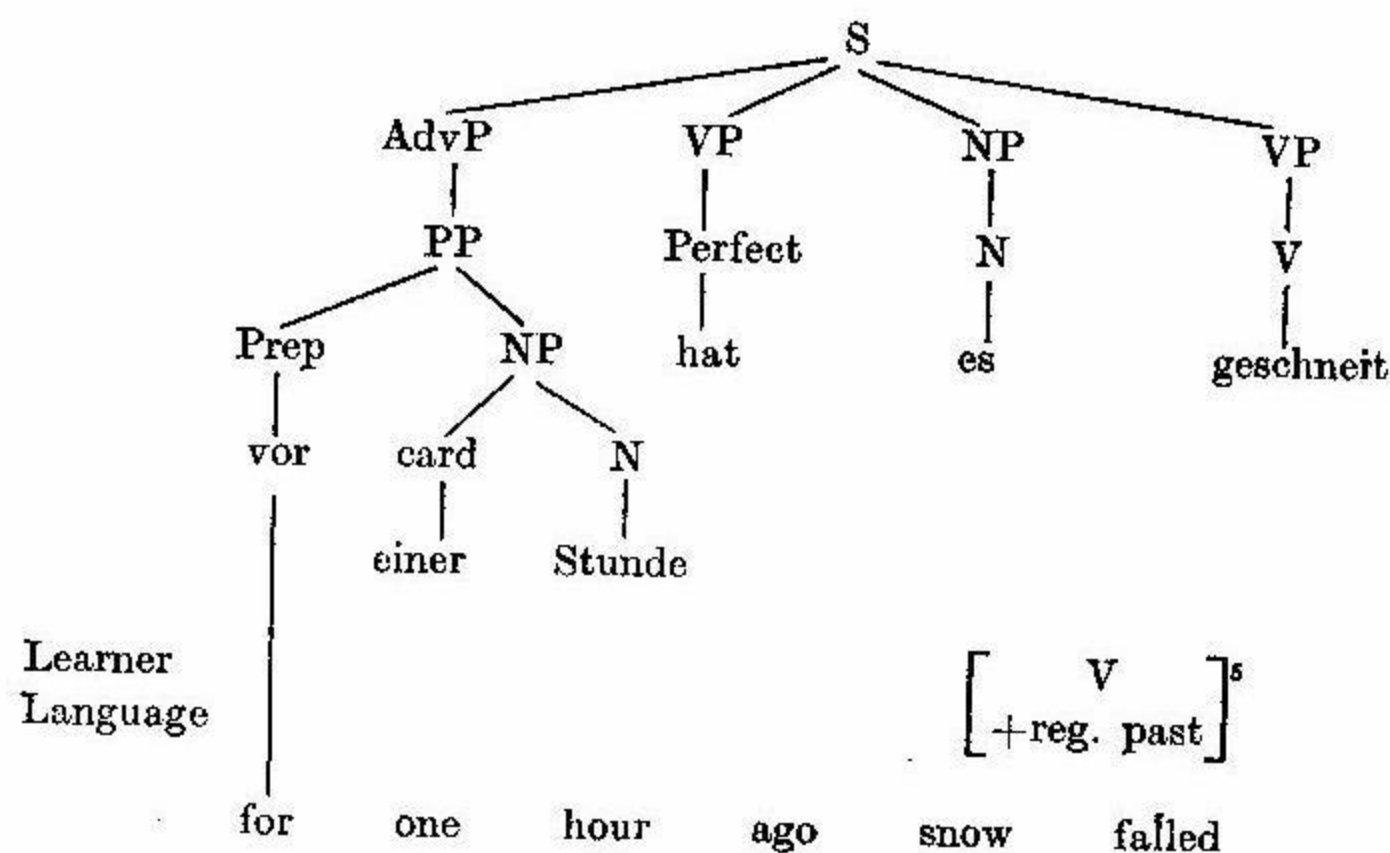
In this example the learner language overexpands the AdvP constituent. It includes the target language adverb as well as the source language preposition. This restructuring might have been facilitated by the existence of the PP construction *for one hour* in the learner language, but it is clearly caused by interlingual interference. The classification as interference caused error is the only one compatible with the data, which abounds in learner language sentences of the type *Sunday for two weeks; Since for two days* — contexts, where the assumption of intralingual interference is implausible. In (11) learner language restructuring altered the target language structure only slightly, but restructuring may also be almost total, as in (12) where the target language structure cannot be retrieved anymore:

(12) The sun is not to see

Restructuring has erased all traces of the target language structure by taking the source language structure in toto as a model to structure the learner language output. Compare (12) with the source language *die Sonne ist nicht zu sehen*. This is no longer a case of restructuring the target language but of structure copying from the source language.

Constituent restructuring has been shown to be an active process in the learner language. By applying certain syntactic surface constraints of the source language in the learner language, the target language input is restructured.

' Cf. note 3.

3. Constituent reclassification

The target language constituents are reclassified in the learner language so that they belong to the source language word classes. This is achieved e.g. by conversion from verb to noun or by putting a verb not so classified into the class of verbs with separable particles. Consider (13).

(13) I breakfast

Target language

Source language

Learner language   I breakfast
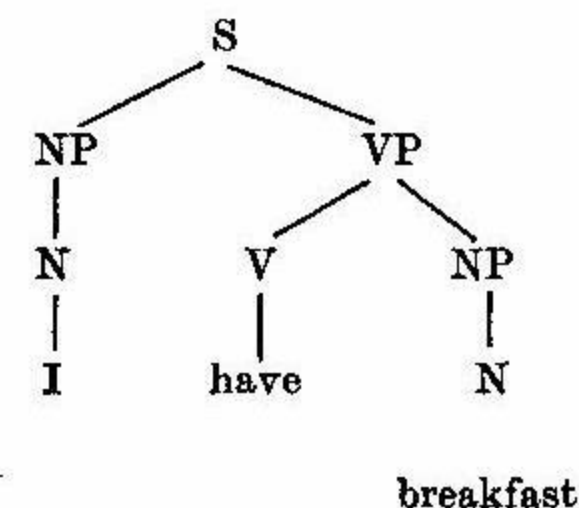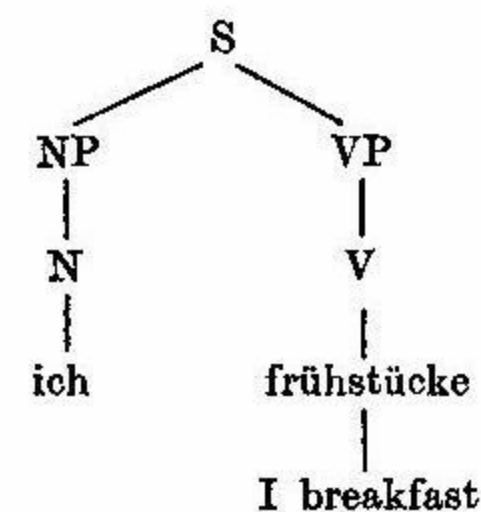
In the learner language the noun of the target language object-NP constituent has been reclassified as a verb on the basis of the classification of the source language. The learner language output structure becomes identical with that of the source language. The next example shows that not only the major word classes may be affected by reclassification, but subclassification may be changed, too. Consider (14).

(14) She will home

Target language

```
                S
         NP         VP
         N       V      S
        she    wants   to    VP
                           V     Adv
                          go    home
```

Source language

```
              S
        NP        VP
        N      M     Part(V)
       sie    will   heim(—gehen)   (dialect deletes verb)
```

Learner language

```
       she    will   home
```
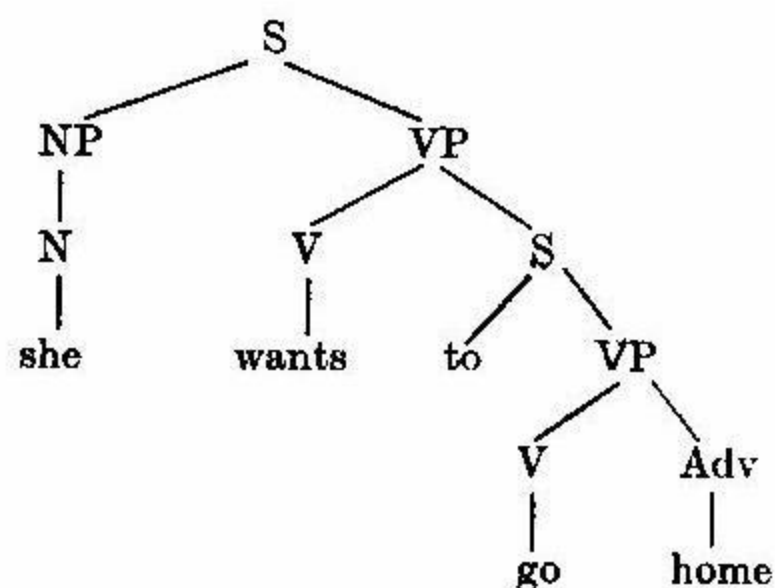
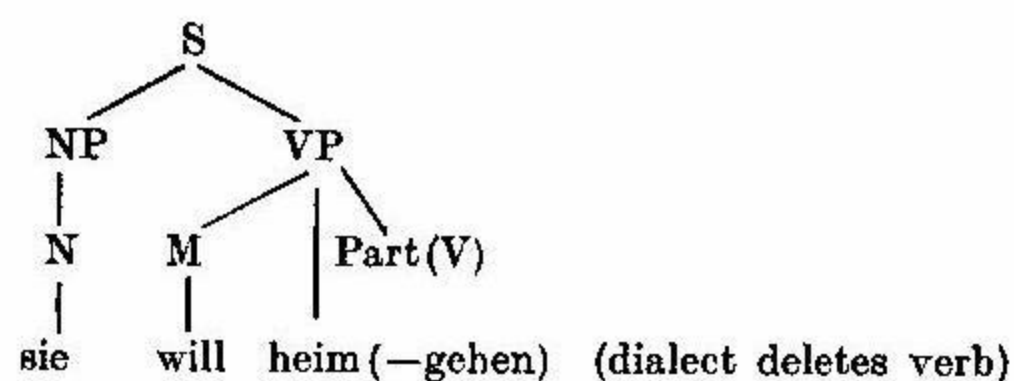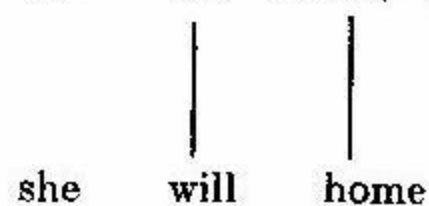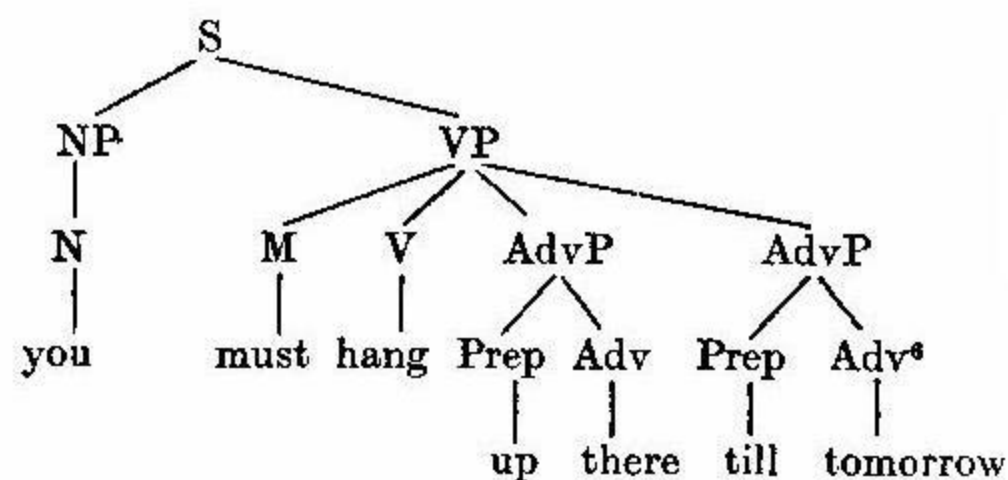In the learner language output *home* has been reclassified from the target language adverb into a verbless verbal particle following the source language classification, and additionally, the source language volitional modal verb is introduced into the learner language structure.
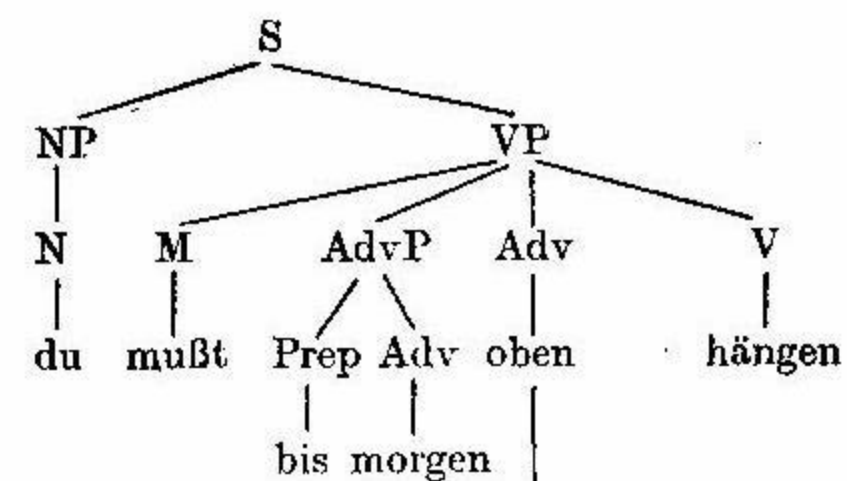
(15) You must hanging up till morning

Target language

```
                    S
           NP              VP
           N       M    V    AdvP      AdvP
          you    must  hang Prep Adv  Prep  Adv*
                            up  there  till  tomorrow
```

* The structural function of these verbs is noun-equivalent (cf. Onions 1971).

Source language

```
                    S
          NP                  VP
          N     M      AdvP     Adv      V
         du   mußt  Prep Adv   oben    hängen
                    bis morgen
```

Learner language

$$\begin{bmatrix} V \\ +\text{Progr} \\ -\text{be} \end{bmatrix}^{7}$$

```
  you must hanging   up    till morning
```
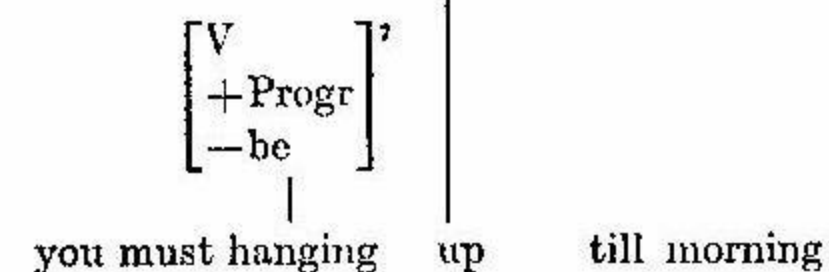
This learner language output shows that *up* is reclassified from target language preposition to adverb according to the source language classification. In the source language the Adv *morgen* and the N *der Morgen* are identical in form. The learner assumes that the same fact holds true for the target language, producing the Adv *morning* instead of *tomorrow*. This is a lexical mistake, though, and will not be treated here.

(16) The children go to a pet-show and they take his animals with

Target language

```
                  ...S
         NP                 VP
         N          V    NP          PP
       ...they    take  Poss   N   Prep   NP
                        their animals with  N
                                          them
```

---
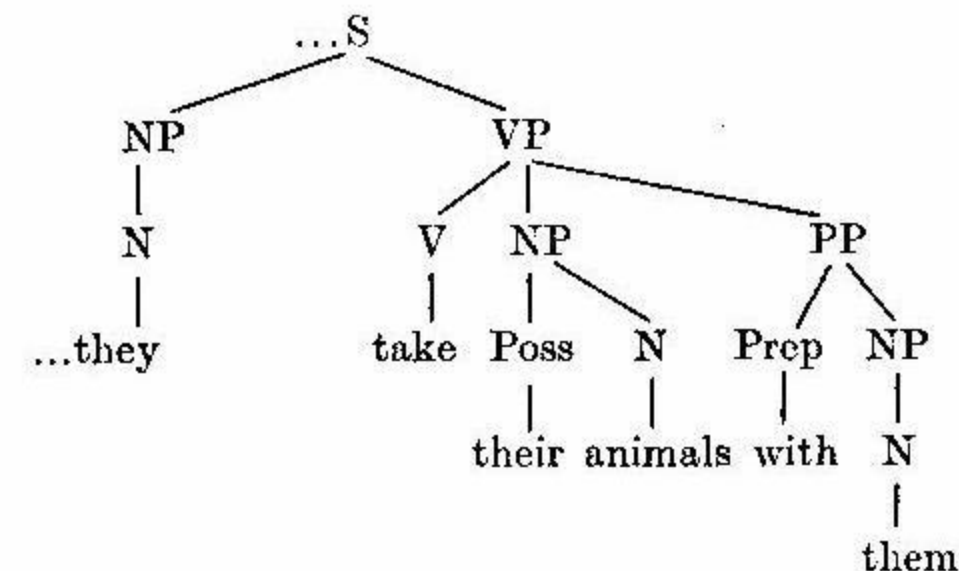
[7] Whether this is the proper learner language specification is not quite clear, but plausible, cf. *he is go* where *go* is $\begin{bmatrix} V \\ +\text{Progr} \\ -\text{ing} \end{bmatrix}$.
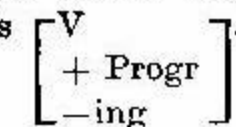
A weaker claim would assume a specification like e.g. $\begin{bmatrix} V \\ -\text{finite} \end{bmatrix}$.

Source language

```
              ...S
        ┌──────┴──────┐
       NP             VP
        │        ┌─────┼──────────┐
        N        V     NP        Part
        │        │   ┌──┴──┐      │
      ...sie   nehmen Poss   N    mit
                       │     │
                     ihre  Tiere
```

Learner language

```
                       [−Pl]
                        │
      ...they   take  his animals   with
```

In this example *to take s. o./s. th. with s. o.* is reclassified in the learner language as belonging to the class of verbs with separable particles like *to call s. o. up*. This way the target 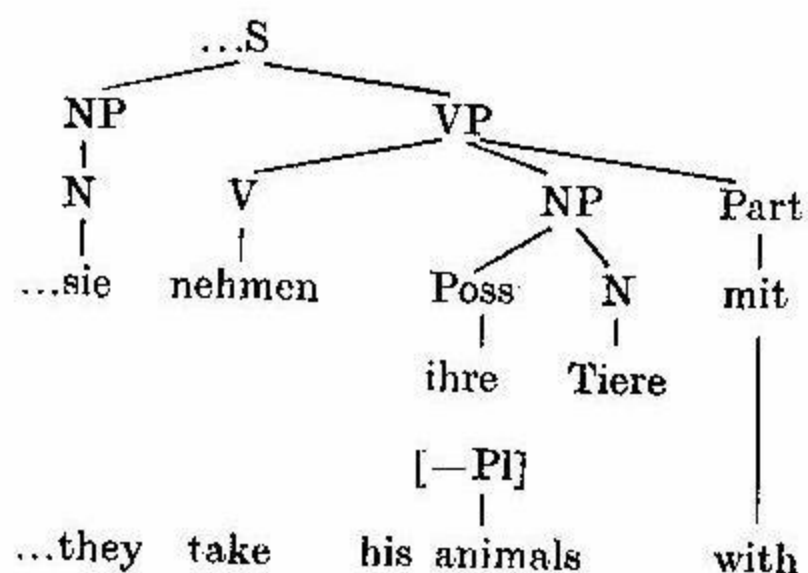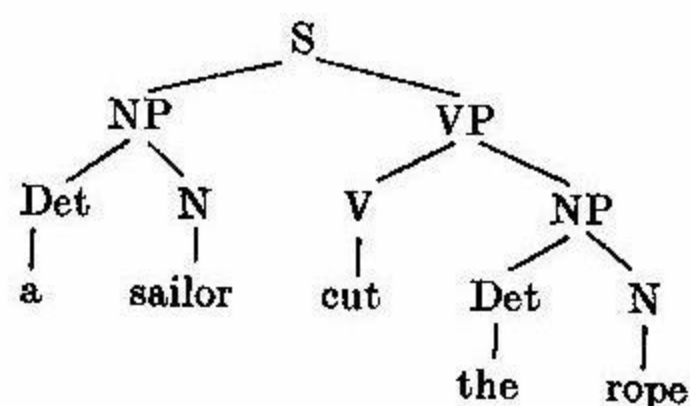language prepositional phrase becomes reduced to the mere particle in the learner language output following the source language verb classification. The preposition is reclassified as a particle.
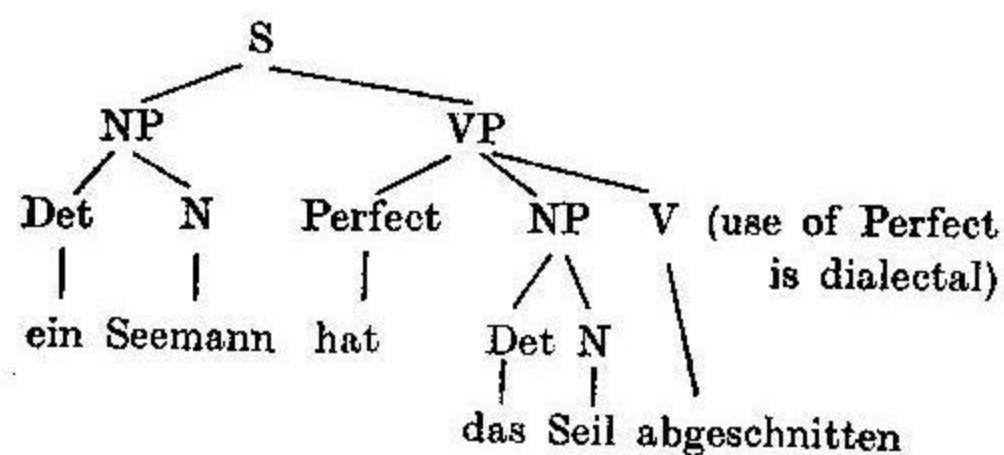
The next example shows that reclassification need not change the constituent structure of the target language sentence drastically. In (17) only V is expanded by the particle.

17) A sailor cut up the rope

Target language

```
                    S
          ┌─────────┴─────────┐
         NP                   VP
      ┌───┴───┐           ┌────┴────┐
     Det      N           V         NP
      │       │           │      ┌───┴───┐
      a     sailor       cut    Det      N
                                 │        │
                                the     rope
```

Source language

```
                    S
          ┌─────────┴─────────┐
         NP                   VP
      ┌───┴───┐       ┌───────┼────────┐
     Det      N     Perfect   NP        V  (use of Perfect
      │       │       │     ┌──┴──┐         is dialectal)
     ein   Seemann   hat   Det    N
                            │      │
                           das    Seil   abgeschnitten
```

Learner Language

```
      a sailor                  cut up   the rope
```

In this example the verb-particle construction is taken over from the source language into the learner language output. The target language simple verb is reclassified as V+Part to fit the source language frame. Yet, the learner language VP-structure preserved the target language order of constituents.

These few examples should have been sufficient to show that constituent reclassification is another productive process in the learner language. It changes the target language word class or subclass into that of the source language.

4. Resubcategorization and Respecification

Resubcategorization is a learner language process that alters the subcategorization of target language elements according to their subcategorization in the source language. I also include here the change of syntactic features or their specifications. Consider (18).

(18) The Pat bake a cake

Target language
$$\begin{bmatrix} N \\ +proper \\ -Det \end{bmatrix}$$
Pat bakes a cake

Source language
$$\begin{bmatrix} N \\ +proper \\ +Det \end{bmatrix}$$
Der Patrick backt einen Kuchen (dialect)

Learner language
$$\begin{bmatrix} N \\ +proper \\ +Det \end{bmatrix}$$
[−3.Ps. Sg.][8]
The Pat bake a cake

In the source language dialect proper nouns are subcategorized to be preceded by the definite article. In the target language proper nouns are not preceded by Det. The source language subcategorization is carried over into the learner language. In German Det is optional in this context. See also (1). Or consider (19).

(19) I say him:...

Target language
$$\begin{bmatrix} V \\ \underline{\quad} NP \end{bmatrix}$$
I say to him:...[9]

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[8] Cf. note 3.

[9] Assuming the target *say*, I exclude other possible interpretations, e.g. as intralingual lexical error with the target *tell*, because they seem to be less plausible in this context.

Source language $\begin{bmatrix} V \\ + \quad NP \end{bmatrix}$ Ich sage ihm:...

Learner language $\begin{bmatrix} V \\ + \quad NP \end{bmatrix}$ I say him:...

In the target language the Dative-Movement transformation is not applicable with *say*. *say* can only be followed by a PP. In the source language, on the other hand, *sagen* can be followed by a dative object directly. The source language subcategorization of the verb prevails in the learner language: The verb has been resub categorized.

(20) I can see a traffic

Target language $\begin{bmatrix} N \\ +\text{common} \\ +\text{Det}\underline{\quad} \\ +\text{def} \end{bmatrix}$ I can see the traffic

Source language (dialectal) $\begin{bmatrix} N \\ +\text{common} \\ +\text{Det}\underline{\quad} \\ -\text{def} \end{bmatrix}$ Ich seh /an fakea/[10]

                                   (einen Verkehr)

Learner language $\begin{bmatrix} N \\ +\text{common} \\ +\text{Det}\underline{\quad} \\ -\text{def} \end{bmatrix}$ I can see a traffic

The target language direct object-N is resubcategorized to be preceded by a [-def]article. This process is triggered by the source language dialectal subcategorization. In standard German, as well as in the target language, this subcategorization is not grammatical in this context.

In the following example the syntactic/semantic feature [directionality] is respectivicified in the learner language.

(21) The stranger pushed him in the water

Target language   The stranger pushed him   into   the water

                                   $\begin{bmatrix} \text{Prep} \\ +\text{direction} \end{bmatrix}$ $\begin{bmatrix} \text{Det} \\ +\text{def} \end{bmatrix}$

Source language   Der Fremde stieß ihn   in   das Wasser

                                   $\begin{bmatrix} \text{Prep} \\ \pm\text{direction} \end{bmatrix}$ $\begin{bmatrix} \text{Det} \\ +\text{def} \\ +\text{direction} \end{bmatrix}$

Learner language   The stranger pushed him   in   the water

                                   $\begin{bmatrix} \text{Prep} \\ \pm\text{direction} \end{bmatrix}$ $\begin{bmatrix} \text{Det} \\ +\text{def} \end{bmatrix}$

The target language specifies the feature [directionality] in the prepositions *in* and *into* with opposite values: *into* as [+direction] and *in* as [-direction] (except in combination with certain words of motion, e.g. *put it*). In the source language this contrast is neutralized in the preposition *in*. Directionality is specified by the following Det in the source language in (21): *das* is specified as [+direction] and *dem* is specified as [-direction]. The target language determiner remains unspecified for directionality. In our example the two source target language equivalents would be:

source language   in $\begin{Bmatrix} das & : & into \\ dem & : & in \end{Bmatrix}$ the   target language

For his learner language output the student selects source language *in* because of its phonological and semantic similarity, but fails to recognize the syntactic difference in the interaction of preposition and determiner in source and target languages. He combines the directionally neutralized source language preposition with the directionally unspecified target language determiner in his learner language. In the learner language, then, directionality remains unspecified. If it is analyzed according to target language rules, then (21) must be interpreted as nondirectional. Resubcategorization and respecification have been shown to be productive processes in the learner language, altering the subcategorization and the feature specification of target language constituents according to their source language subcategorization or feature specification.

     I have presented these examples to show that source language rules, constraints, classes, subcategorizations and syntactic feature specifications,

can be used to relate the learner language to the target language. I now claim that this descriptive device also reflects what actually happens. At the beginning of the process of second language learning, the learner uses the full grammatical knowledge etc. available to him to analyze and produce novel (=target language) sentences. The greater part of that "knowledge" consists of source language rules etc. The insecurity in the analyzability of the target language and the uncertainty in the applicability of target language rules may lead to the activation of source language knowledge. This strategy can be helpful (transfer) or a hindrance (interference) in target language analysis or production via the learner language. Learner language monitoring will increase with the progress made in target language acquisition as more new rules are learned and old ones become automatized. The learner language will become more and more independent of the source language and will become more and more dependent on the target language.

The examples, taken from data of the early stages of second language acquisition, were chosen to show the activation of source language knowledge in the learner language that results in target language inacceptability. The description and the interpretation are compatible with the data. Interference, then, may trigger a variety of learner language syntactic processes in a considerable number of instances in a wide variety of learner languages over a prolonged period of the acquisition process.

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