THE NOMINAL INFINITIVE IN ITALIAN.

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O. Introduction.

This paper is about nominalization in English, Dutch and Italian, especially about English gerunds and Dutch and Italian Nominal Infinitives. It serves as an addition to work by Reuland (1985a,b; 1986a,b), who so far has treated only Dutch and English nominalizations.

The general framework is LGBt(Chomsky 1981,1982), but some of my priorities derive from other recent work in syntax, notably Lieber (1980), Stowell (1981) and Koster (1978, 1986).

From Lieber (1980) I borrow his percolation conventions and more generally the Strong Lexicalist Position, according to which all word formation is in the Lexicon. This raises immediate problems for verbal complexes containing a verb stem and an inflectional affix, since V and I give rise to different projections in syntactic structure, mainly for reasons of case assignment to the subject-NP. In Chomsky (1981) this problem does not exist, because there some movement of INFL movement is assumed (Rule R in (1981), previously called Affix Hopping), a lowering rule leaving no trace, giving rise to seperate levels of representation. If no other solution to this problem can be found, a Strong Lexicalist position is untenable; moreover, this will support Chomsky's assumptions about the number of levels of representation and the status of DS.

In this paper I will show, following Reuland, that SLP still has a strong case. The main problem, the different projections of I and V, I will solve by assuming a dependency relation between the inflectional affix and the canonical INFL-position, in the sense of Koster (198%). If this is correct, one of the few arguments left for the status aparte of DS vanishes.

This paper has the following contents: section1 serves as a general introduction to the phenomenon; sections2, 3 and 4 contain the English, Dutch and Italian facts. Reuland's analysis of the Dutch NI's is shown not to match the Italian facts. Therefore in section 5 a unified approach is attempted based on two assumptions: - the English affix "-ing" is either inflextronal or nominal, whereas the Italian and Dutch affixes are always inflectional; - the inflectional affix "-ing" in English is

+Finite, whereas the affixes in Dutch and Italian NI's are -Finite.

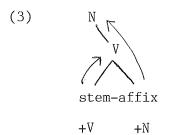
1. Nominalization.

In all three languages under consideration here, more or less verbal constructions can appear in canonical NP-positions. Part of this process or phenomenon is a nominalization of the verb. In Dutch and Italian the nominalized verb has the morphological appearance of an infinitive, with or without article:

- (1) (Het) bejaarden verzorgen is een taak van de overheid.
 (The) old-folks taking-care-of is a task of the government.
 'Taking care of the old folks is a task of the government.'
- (2) (I1) ricercare la verità non è facile. (The) seeking the truth not is easy. 'Seeking the truth is not easy.'

In English, as is clear from the translations in (1) (2), the nominalized verb shows up as a gerund.

These Nominalized Infinitives (hence: NI's) and gerunds have the same distributional properties as ordinary NP's (a.o. Van Haaften et al. (1985)). They have many interesting properties, most of them touching on the relation between morphology and syntax. To be more specific, in Dutch and Italian NI's the verbal base still exerts its syntactic force 'inside' the NI, while the affix seems to determine the nominal character of the NI as a whole. In terms of Lieber's percolation conventions (Lieber (1980)) this yields a paradox since at one level the verbal features of the verb-stem must be present and at another the nominal features of the affix.



Stated this way, the NI's pose a challenge to either the percolation conventions, or the Strong Lexicalist Hypothesis (as the problem can easily be solved by way of movement).

However, the English gerunds don't seem to be that puzzling, so I will first discuss these constructions, then gradually complicating things presenting the Dutch and Italian facts.

2. English gerunds.

Consider the following sentences:

(4) i Tom's refusing the offer surprised me.

ii Tom's refusing of the offer surprised me.

iii Tom's persistently refusing the offer surprised me.

iv Tom's persistent refusing of the offer surprised me.

v *Tom's persistent refusing the offer surprised me.

vi *Tom's persistently refusing of the offer surprised me.

The two questions $\ensuremath{\text{I}}$ would like to answer here are :

- how are these constructions to be described in general ?

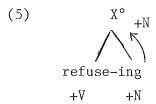
- how is the ungrammaticality of sentences (4)v and vi to be explained?

Starting with the first question, the Strong Lexicalist Position (SLP), according to which words are syntactic constituents at all levels, entails that every morphological word satisfies a syntactic predicate of the form 'is an X°', where X is some syntactic category (Reuland (1986b)). So, an element in (4) is a morphological word iff it is an X° and vice versa.

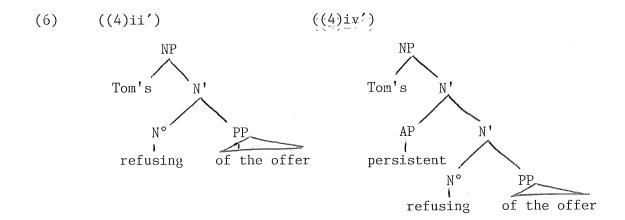
Is "Tom's refusing the offer" in (4)i a morphological word? Probably not, since syntactic processes are at work within this segment, because obviously "the offer" receives accusative case from "refusing". So the gerund as a whole is not an X°. "Refusing" is, of course, a morphological word from a Strong Lexicalist point of view, so it is an X° as well.

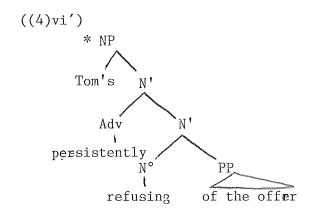
This sets the boundaries between morphology and syntax, if any, in these constructions: "refusing" is morphology, therefore in the lexicon, the rest of the construction is syntax.

Now let's focus on the morphological word. Assuming that the verbal stem has the feature-specification +V and the affix +N, there is, following Lieber's percolation conventions, only one possibility: the X° is +N:



This configuration would explain only sentences ii, iv and vi in (4):

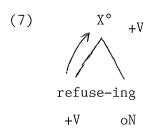


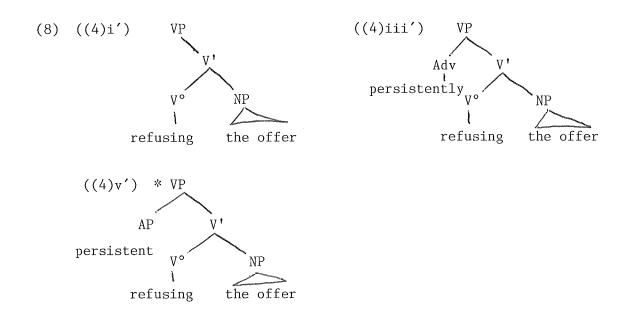


The ungrammaticality of (4)vi would follow from the impossibility of having an adverb in a nominal projection.

This leaves us with sentences (4)i, iii and v to explain. Clearly, a way has to be found to turn X° into a V°, in other words, to allow percolation of the verbal features of the stem. This is only possible by Lieber's percolation conventions, if the branching node fails to obtain features of the relevant kind from the affix morpheme. So, this affix morpheme cannot be specified +N in these cases, but must be something else. I will assume that we have two different '-ing'-morphemes, one +N, another one oN. The same observation is made in Borer (1984); she distinguishes between a lexical and syntactic affixation of '-ing', the latter among other things notinterfering with the syntactic properties of the verbal stem. Syntactic affixation is of course undesirable from a strong lexicalist point of view, but Borer's terminology, 'opaque' vs. 'transparant', is very useful, I think, especially when related to Lieber's third percolation convention.¹

So we have a V-projection in the cases (4)i, iii and v:





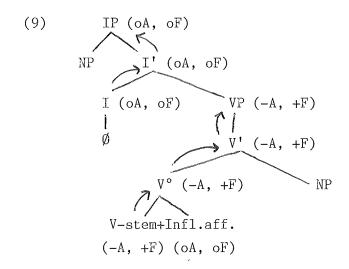
(4)v again is excluded because an AP cannot be licensed in a verbal projection.

We now have explained the ungrammaticality of the sentences v and vi in (4). I regard the requirment for adverbs and adjectives to be within a verbal and nominal projection respectively uncontroversial and satisfactory, though stated here in an imprecise way.

But there's still more to be said about the so to speak 'verbal' gerunds, standard example (4)i. In our description so far, they are by no means ready to obtain their place in an argument position, since all we have is a VP yet. Furthermore, the presence and form of "Tom's" is unaccounted for.

The gerunds of the type "Tom's (persistently) refusing the offer", no matter how 'verbal' they are, always are in the end of a nominal character: they have the external grammar of an NP. Following Reuland (1986b) this means 'to be an argument required to be in a case position'. In the terminology of Reuland (1985b) this means that the gerund as a whole must be +A or oA, that is, it must be or must be able to be licensed as an argument. Now which of the elements present in (4)i can project this property in order for the gerund as a whole to be able to be licensed as an argument? There are three candidated in Reuland's (1985) system of categorial heads: C, I (both of them oA), and N ² (+A). There is no N involved in the gerund under consideration taht can project, so we can discard the latter option. Still, intuitively it is the affix that contributes its nominality to the construction as a whole. But in our account so far, the affix is not +N and does not project, in order for the verb to exert its force. So it cannot contribute directly to the nominality of the gerund. Nevertheless we might follow the hunch that the affix carries the relevant features (+/o A)

and consider the possibility of projecting them in an indirect way. This might follow if we consider the affix as an inflectional affix (Reuland (1983)), therefore of the category I(NFL), feature-specification oA, oF. Following Reuland (1985b, 1986b) we still must assume a canonical INFL-position 'between' NP and VP, since this position is indispensable in a predication of an NP and a VP, which is what we're dealing with here. ⁴ So what we have is:



The canonical INFL-position is 'null', the NP-VP-predication as a whole is an INFL-projection.

A similar analysis will be needed to describe finite inflection from a strong lexicalist point of view, and has in fact been proposed for this purpose in Reuland (1986b). Null-Infl. may be identified by a VP, e.g. under a sisterhood condition. The presence of a canonical Infl-position need not be derived from PS-rules in English, as there is clear evidence from data: for example, it is filled in the case of do-support.

I will propose now, that both in sentences with finite inflection and in in 'verbal' gerunds comparable to a NI, there exists a certain relation between the inflectional morpheme realized on the verb-stem, and the canonical Infl-position. Furthermore I will presume that this relation is a dependency-relation in the sense of Koster (198 ϕ), that is a relation having at least the following properties:

- (10) a. obligatoriness
 - b. uniqueness of the antecedent
 - c. c-command of the antecedent
 - d. locality.

If this is correct, then the elements in this relation, the \emptyset -Infl. and the inflectional affix can share and exchange whatever properties might be at issue, so that any feature of the affix that might contribute to the

'nominal' status of the gerund as a whole may percolate up through the canonical Infl-position.

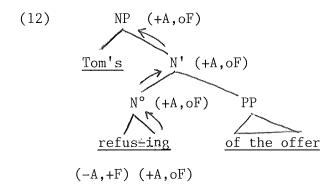
In the same way, a tensed inflectional morpheme attached to a verbal stem in a sentence with finite inflection, can get his features up via the Infl-position, in order for the subject-NP to receive nominative case under standard assumptions. Or alternatively, when for some reason the verbal complex of the stem plus the affix is taken to be in Infl/position, a similar dependency relation may hold between the verbal stem and the verbal trace, in order for the latter to assign objective case to a direct object.

The properties listed in (10) are as the reader may check for himself not unreasonable for the relation between INFL and the inflectional affix. Of course one may question the extension of a system meant for syntactic constituents only to include elements below X°-level. Still I can't see another way of combining SLP with the requirements the various modules of the theory of grammar pose to the constructions at hand. Dropping SLP of course, there is another way: movement (cf. May (1977), Lebeaux (1984), Pesetsky (1985), Reuland (1986a), Borer (1984)), but the nowadays not uncommon practise of replacing the metaphore of movement by locality principles (Koster (1978), (1984), (1986)) enables one to maintain the SLP, so convincingly argued for by Lieber (1980) and Selkirk (1982).

Summarizing, in the case of the 'nominal' gerund, (4)ii, repeated here for convenience as (11):

(11) Tom's refusing of the offer surprised me.

the verbal stem carries the feature-specification (-A, +F) and the 'nominal' affix is (+A, oF), as in (12):



The gerund as a whole is a regular NP, (+A,oF), resulting from the percolation of the features of the affix, straight Lieber. "Tom's" is a determiner as

in "Caesar's destruction of the city.". There is room for adjectives, as in (4)iii, but not for adverbs, witness (4)vi. The oF feature requires a formal argument (Reuland (1985b)), a variable in the sense of Higginbotham (1983) which gives this construction not only the external grammar of an NP, but the internal as well (for this variable, see section 3).

In the case of the 'verbal' gerund, as in (4)i and (13):

(13) Tom's refusing the offer surprised me.

the verbal stem is again (-A, +F), but the inflectional affix (oA, oF). Accordingly, these features cannot project, so, with Lieber's third percolation convention the verbal features percolate to the first branching node and so on, giving rise to a full fledged VP (cf. (9)). This VP requires an argument and to save it from an infinite regress an Infl-projection has to intervene (see fn. 4, and Reuland (1985b)). A zero-INFL heads this projection carrying, either by itself, or following the idea that the affix has something to do with the nominality of the whole, by means of its dependency relation with the inflectional affix, the featurespecification (oA, oF). The gerund as a whole will be an IP 5 . The subject of the predication, "Tom's", will receive genitive case 6 , being a sister to a nominal projection, not unlike the determiner in an NP can, as far as this process is clear. An adverb is welcome ((4)iii) but the gerund as a whole does not have the internal structure of an NP (see section 5), so that adjectives ((4)v) and articles (14) are excluded.

(14) *The refusing the offer surprised me.

Let's now turn to the Dutch facts, which seem to be more of a puzzle, since not every NI in Dutch can be described as either a full fledged VP or a regular NP; they rather show a mixture of nominal and verbal properties.

3. Dutch Nominal Infinitives.

Consider the following sentences:

- (15) i Het appels eten begint mij te vervelen.

 The apples eating begins me to bore.

 'Eating apples begins to bore me.'
 - ii Het eten van appels begint mij te vervelen. The eating of apples...

((15)) iii Het aanhoudend appels eten begint mij te vervelen. The continuously apples eating...

iv Het aanhoudende eten van appels begint mij te vervelen. The continuing eating of apples...

v Het aanhoudende appels eten begint mij te vervelen. The continuing eating apples...

vi Het aanhoudend eten van appels begint mij te vervelen. The continuously eating of apples...

Sentences i-iv match the English examples in (4)i-iv. However, whereas the English (4)v and vi are out, the Dutch (15)v and vi are perfectly all-right. Even a combination of adjectives and adverbs is allowed, provided the verbal part remains 'inside' the nominal:

(16) i Dat vervelende constant de bal hooghouden begint mij te vervelen.

That annoying constantly the ball keeping-in-the-air...

ii *Dat constant vervelende de bal hooghouden begint mij te vervelen.

That constantly annoying the ball keeping-in-the-air...

((16)ii is ungrammatical in the intended sense, with the adverb modifying "vervelende de bal hooghouden"; it is grammatical when the adverb is intended to modify "vervelende" only.)

Another combination of nominal and verbal aspects is (17):

(17) Dat vervelende constant hooghouden van de bal begint mij te vervelen. That annoying constantly keeping-in-the-air of the ball...

What are we to make of these structures ?

Clearly, the division of labour between morphology and syntax hinted at in section 2 applies: just the formation of the infinitive ("eet" verbalstem, "-en" affix) is morphology, therefore lexicon; the rest is syntax, since most obviously syntactic processes are at work. 7

Strikingly, all NI's in (15) have both the external and the internal grammar of an NP. The presence of the determiner and the possibility of having an adjective in all cases, leads inevitably to this conclusion. ⁸ NI's without determiner are possible, as in (18), but then an adjective construed with the NI is excluded:

(18) i Dieren pesten is verwerpelijk.
Animals harassing is reprehensible.

ii *Afschuwelijke [dieren pesten] is verwerpelijk.
Terrible animals harassing is reprehensible.

I will return to these matters concerning the internal grammar of an NP,

but first I will render Reuland's description of the Dutch facts and his explanation of the differences between Dutch NI's and English gerunds (Reuland (1986b)).

This decription is mainly based on two points :

- a differentiation between 'inflectional' and 'derivational' affixes on syntactic grounds,
- a set of percolation conventions based on the direction of government of the elements involved, or put differently, on the place these elements occupy in their respective projections.

Reuland, holding the SLP, refects Affix Hopping or Rule R (Chomsky (1981), Pesetsky (1985)) on the ground that whatever stipulations are needed to make a movement solution work will make an alternative without movement equally possible, notably the stipulation of a zero-Infl position as mentioned in section 2.

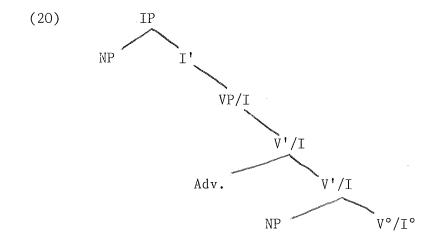
The differentiation between 'inflectional' and 'derivational' affixes is established as follows. On S-structure every morphological word satisfies a syntactic predicate of the form 'is an X°', X being some syntactic category (this is the SLP). The set of syntactic categories contains a.o. I(NFL). I is taken to be a set of elements having specific lexical and syntactic properties, which make it the pivot of the predication, even when these elements happen to be realized as 'bound morphemes'. So inflectional elements (as opposed to 'derivational' elements) have a specific lexical meaning, making a compositional semantic interpretation possible, and can be considered members of a certain syntactic category, satisfying the syntactic predicate 'is an INFL', (n perhaps being -1 when INFL is realized as a bound morpheme). 9

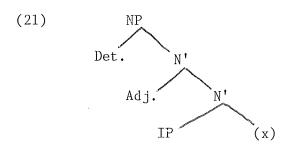
Percolation then takes place according to the following assumption:

(19) "Two categorial heads in the same X° project simultaneously just in case they occupy identical positions in their respective projections" (Reuland 1936b, (43)i).

In a Dutch syntactic structure, both I and V occupy the rightmost position in their respective projections. So the X° dominating the verbal stem and the inflectional affix will be a V° and a I° at the same time. This happens in NI's and in sentences with finite inflection alike. For some time, the projection will be dual. Being a V-projection it will allow direct objects, adverbs, etc.; Being a I-projection it will take I's 'nominal' features along, and eventually put them to use. The V-projection will end when its presence is no longer required; then the I-projection will take over, or rather continue, creating a place for the thematic and structural subject-NP, required by the VP. In NI's this subject will most likely be PRO.

The resulting structure is (20). Inevitably, it will have to be extended as in (21), since the NI in Dutch can have the internal grammar of an NP.



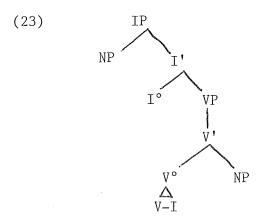


In English, V governs to the right and I to the left. So, they are incompatible and cannot project simultaneously. In this case, Reuland's second assumption applies:

(22) "Features of incompatible heads contained in the same segment may distribute over adjacent null-segments" (Reuland, 1986b, (43)ii).

Suppose V projects. This will give rise to a full fledged VP. Direct objects will receive objective case from the verbal head. Still an Infl-projection is needed, because an NP-VP-predication cannot do without one. Therefore we must conclude that the canonical Infl-position is still present, though null. Being an adjacent null-segment, it can receive the inflectional features that were prohibited to project directly by (19), and percolate them upward. This is of course largely the account I followed in section 2.

Cf. (23):



Why can this construction not be extended in the way (20) can, that is, why can 'verbal' gerunds not have the internal grammar of an NP? For this, we have to look more closely at the way in which the variable that is essential to phrases with the internal structure of an NP (Higginbotham (1983)) can be construed with Dutch NI's and English gerunds.

Higginbotham (1983) argues that phrases with the internal structure of an NP have the formal structure (24):

(24)
$$\begin{bmatrix} NP & Det & N & ... & N & (x) & ... \end{bmatrix}$$
 ,

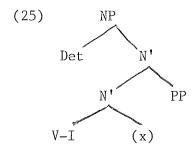
N' being a set expression, N the set predicate and (x) the variable, to be licensed by either the N or the Determiner. When a Determiner is present, there must be a variable too, since vacuous quantification is prohibited in natural languages (Chomsky (1982)); alternatively, when N cannot license the variable, as is arguably the case in NI's (Reuland (1986b)) the presence of the Determiner is imperative for the NI to have the internal structure of an NP. This of course explains the ungrammaticality of (18).

Now the exact way in which the variable is construed in NI's and gerunds is derived from Reuland's second assumption (22). The inflectional affix is taken to at the same time realize a non-finite INFL and contribute 'nomina-lity'. We can refer to this state of affairs by stating that the affix has both inflectional and nominal properties. In Dutch, the inflectional properties of the affix are compatible with the verbal stem, but the nominal properties are not, because N governs to the right and occupies a medial position in its projection. So these properties cannot percolate along the V/I-projection line, and must start out from an adjacent zero-segment, the variable (x) in (24). Now in a structure like (20), this zero-segment is always adjacent, no matter at what level the variable is construed.

In English gerunds of the type (23), partly the same reasoning applies: the nominal part of the inflectional affix is incompate ble with the V, so it has to be realized on an adjacent null-segment. Now the only reasonable

candidate to function as a set predicate in (23) is IP. However, when the variable is construed with the IP-node it will not be adjacent to the V-I complex, because the direct object intercedes. Therefore, a 'verbal' gerund like (23), though appearing in argument position, cannot have the internal structure of an NP. In fact, this is a direct consequence of the SVO-status of English.

There is of course one possibility of realizing the nominal properties of the affix on an adjacent null-segment, that is, when the variable is immediately to the right of the affix. Then the variable will intervene between the verbal complex and the direct object, and turn the construction as a whole into an ordinary NP, obscuring the verbality of the construction completely:



The direct object will now be lacking case, so a dummy case assigner "of" will show up. An NP will be possible in the Det-position, but it will no longer be the subject of an NP-VP-predication. This is of course the 'nominal' gerund, as exemplified in (4)ii.

Comparing (20),(21) to (23),(25) it is immediately clear that in Dutch NI's, the verbal and the nominal part can both be randomly shortened and extended, independently of each other, as long as the nominal part remains 'outside' the verbal part. The fact that V and I satisfy the harmony-requirement (19) enables them to project simultaneously and to exert their force when required to do so. Since I will only become relevant when the verbal part has finished its job except for the assignment of the theta-role to the thematic subject, the I-projection will always remain outside the V-projection. The SOV-character of the language will ensure that the incompatible nominal features can always be realized on an adjacent null-segment. So a Dutch NI will per definitionem have a mixed nominal-verbal quality.

The English gerunds will always be either verbal (23) or nominal (25). V and I, nor V and N satisfy the harmony-requirement (19), so they cannot project simultaneously. Therefore the verbal force is absent in (25), making

it a purely nominal construction, not a mixed one. In the verbal gerunds (23) the presence of nominal features is excluded, because there is no adjacent null-segment for them to be realized on, due to the SVO-character of the language.

So far Reuland's (1986b) account of the Dutch and English facts. Interestingly, his description carries over to constructions with finite inflection. I will not go into that now, but consider it to be an advantage over alternatives that do not make similar generalizations.

Reuland's description is based on important assumptions about the nature of INFL in Dutch as opposed to INFL in English. Following Stowell (1981), the canonical Infl-position can no longer be imposed on syntactic structures by independent phrase structure rules, but has to be derived from data. Now it will be extremely difficult for a Dutch child to derive the presence of the canonical Infl-position from data, since INFL in Dutch is never realized independently from the verb, whereas in English it is. Continuing this line of argument, it would be infelicitous to have to resort to the canonical Infl-position while trying to explain Dutch linguistic facts, and Reuland's account of NI's (and constructions with finite inflection for that matter) in Dutch just given renders this position in Dutch syntax superfluous.

Reuland's description of the English facts given here and mine given in section 2 are not contradictory, and a consentaneous account is feasible. However they differ in the way they treat affixes, and in the locality requirements brought into play.

On the other hand, a description of the Dutch NI's along the lines of section 2 will make crucial use of the canonical Infl-position, which may at present be seen as a disadvantage. So I will not try to do so now, but return to the matter after an investigation of the strong empirical claim Reuland's account makes in relating the properties of the English gerunds to the SVO-character of that language. For this I will turn to another SVO language: Italian.

4. Italian Nominal Infinitives.

In Italian, V governs to the right, and I to the left. If Reuland (1986b) is correct and if no other factors interfere, Italian NI's are predicted to show the same clear classification as English gerunds: we would expect one completely verbal construction with the external grammar of an NP at most, and one completely nominal construction, comparable to the 'mixed'

construction in English gerunds famous from Chomsky (1972).

The NI (with determiner) is far from popular in everyday Italian, and it proved difficult to extract clear grammaticality judgements from native speakers. Therefore I was fortunate to find that Gunver Skytte (1983) and Giampaolo Salvi (1985) had done extensive research into this part of Italian syntax, and my findings are mainly based on their collections of facts.

Interestingly, Salvi argues that nominal and verbal properties are never found together in one NI-construction at the same time, as in English gerunds, while Skytte observes that the NI's are of a mixed nominal/verbal nature, and that the extent to which they are either verbal or nominal can vary in a graded manner, like in Dutch NI's.

Let me first give the Italian counterpart of the paradigma that was my staring point in the previous sections ((4), (15)):

- (26) i Il ricercare la verità non è facile.

 The seeking the truth not is easy.

 'Seeking the truth is not easy.'
 - ii *Il ricercare della verità non è facile.
 The seeking of-the truth...
 - iii Il ricercare incessantamente la verità non è facile. The seeking incessantly the truth...
 - iv *Il ricercare incessante della verità non è facile.
 The seeking incessant of-the truth...
 - v *Il ricercare incessante la verità non è facile. The seeking incessant the truth...
 - vi *Il ricercare incessantamente della verità non è facile. The seeking incessantly of-the truth...

From (26) it might be concluded that the mixed structures are out in Italian, but the picture is disturbed by some other peculiarities of that language. For instance, as can be seen in it and iv as well, expressing the direct object after an infinitive verb form in a PP is generally prohibited (cf. (27)):

(27) i La lettura della rivista.
'The reading of the magazine.'
ii *Il leggere della rivista.
same meaning

Another factor that makes (26) undecisive is the place of the adjective. In general, the post-head position in NP's is preferred, but 'generic' adjectives are normally in anteposition; and these are exactly the adjectives one would expect in an NI.

So the presence/absence of "di + direct object" is not a good enough test for nominality, nor is the adjective in postposition. (26) will have to be

rewritten in the following way:

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(28) i Il ricercare la verità non è facile.
   ii Il ricercare la verità non è facile. (= i)
   iii Il ricercare incessantamente la verità non è facile.
   iv L' incessante ricercare la verità non è facile. (= v)
   v L' incessante ricercare la verità non è facile.
   vi Il ricercare incessantamente la verità non è facile. (= iii)
```

Now all sentences are grammatical, including v and vi. In the latter sentence the co-occurence of verbal and nominal properties is removed, because of the replacement of "della verità" by "la verità". Sentence (28)v however still shows nominality in the anteposed adjective, and verbality in the verb's governing the direct object.

This would suggest conformity with the Dutch facts. But the verbal domain cannot be freely expanded within the 'nominal' part, like in Dutch:

(29) i Het langzaam wegrijden van de trein.
The slowly driving-away of the train.
ii *L' avviarsi lentamente del treno.
The driving-away slowly of-the train.

With adjectives of course, the sentence is allright:

(30) i L'avviarsi lento del treno. The driving-away slow of-the train. ii Quel costante raffinarsi di una classe. That constant refining-itself of a class.

Another interesting aspect is, that subjects are allowed to be part of the nominalization::

(31) L'aver egli scritto questa lettera. The having he written this letter.

A lot of things are unclear about this phenomenon. For instance, is it a general possibility in NI's, or is it restricted to the choice of the verb? If so, is that a syntactic or a semantic statement? How do the subjects get nominative case and why is the order subject-verb inverted? The construction is of course highly reminiscent of the Italian gerunds with a subject in Rizzi (1982, ch. 3). There it was proposed that the subjects received case from Aux after an Aux-to-Comp movement had taken place. Because of the striking resemblence I will assume that the explanation carries over to NI's (following Salvi (1985)). But since we're discussing adjectives, the main point is that adjectives are never found when the subject is present:

(32) ?*I1 primo aver egli scritto una lettera.

The first-adj. having he written a letter.

The adjective in (28)v is a major problem for any approach that denies the co-occurence of nominal and verbal characteristics in Italian NI's. Therefore Salvi (1985) states that "solo gli aggettivi postii dopo 1'infinito indicano un uso nominale dell' infinito stesso, mentre gli aggettivi posti prima non sono decisivi in questa questione" ¹⁰ (p. 244-245). In other words, the adjective before the infinitive is interpreted as an adverb modifying that infinitive (op. cit. p. 252).

This is not as monstruous as it seems. For one thing, adjectives modifying nominalized verbs always have a "clear adverbial function" (Reuland, 1986b, p. 9). Secondly, the adverbial function can be performed by adjectives like "basso" in "parlare basso" ('speak low'). In general the somewhat verbose ending "-mente" for adverbs is avoided whenever possible, and though these 'adverbial adjectives' are not great in number, they are always preferred over the corresponding adverbial forms (Hijmans-Tromp, 1972, par. 300ff.). Moreover, Salvi notes that not all adjectives corresponding to an adverb are allowed before an infinitive, bit merely adjectives corresponding to adverbs modifying a VP, not those corresponding to sentence adverbs like "probabile" ('probable'):

(33) *Quel probabile ricercare equilibri più avanzati...
That probable seeking balances more advanced...

This, together with the assumption that Aux-to-Comp applies, enables Salvi to explain the absence of adjectives with adverbial function when a lexical subject is present in the NI. For in that case, the NI is an \overline{S} (CP) and the adjective would have to be one corresponding to a sentence adverb, which is out.

So considering the adjectives in question as elements that do not contribute nominality is not absurd. Still I will not follow Salvi here, for the following reasons.

As noted before, in Dutch NI's too, the adjective has a clear adverbial function; still the adjective ending /schwa/ indicates that syntactically, it is an adjective. The adverbial reading is I think inevitable considering the nearness of the verb, but the adjectival ending can nevertheless not be ignored when syntactic structure is the issue.

This consideration gains weight, when we observe that in every NI in Italian a determiner can be expressed. Following Higginbotham (1983) and Reuland (1986b) this would mean that all these constructions in Italian have the internal

grammar of an NP. This in turn makes the presence of an adjective possible.

Thirdly, not only the morphological shape of the adjective, but also its place indicate that it is not likely to be an adverb. For the position before the head is standard for generic adjectives, whereas adverbs tend to immediately follow after the verb. Indeed the option of having an adverb in its preferred position is fully available in Italian NI's:

- (34) i Il continuo ricercare la verità. The continuing seeking the truth.
 - ii Il ricercare continuamente la verità. The seeking continuously the truth.

Finally, Salvi introduces the adjective in anteposition as 'Spec' in the following rewriting rules of \overline{X} -structure :

(35) a.
$$\overline{\mathbb{N}} \to \operatorname{Det} \overline{\mathbb{N}}$$

b. $\overline{\mathbb{N}} \to \operatorname{Spec} \overline{\mathbb{V}}$

What is significant here is not that these rules are of a marked kind, but that the Spec is part of a nominal projection. Hence it would not make sense to deny its contributing nominality to the construction as a whole. Still for reasons of scope it will have to be 'higher' in \overline{X} -structure than ordinary adverbs, because "frettolosamente" is in the scope of "continuo" in (36) and not the other way around, as Salvi notes (1985, p. 263):

(36) Quel [continuo [ricorrere frettolosamente a soluzioni di ripiego.]]
That continuing taking-recourse to solutions of stepping-aside.
hastily

This follows immediately, if we consider the adjective in anteposition as a real adjective, avoiding marked \overline{X} -rules and the inconsistency mentioned above. 11

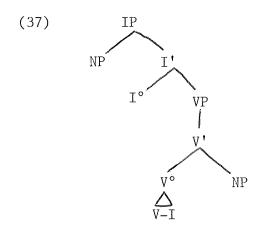
So I will not follow Salvi here, and consider the anteposed modifiers as adjectives, contributing to the nominal character of the NI as a whole.

This means, that sentence type (4)v, indicating a co-occurence of nominal and verbal properties, is attested in Italian, viz. (28)v, so that Italian NI's do not show the same pattern as English gerunds, despite the SVO character of both languages.

Now let's see what the consequences are for Reuland's account. As said before, V and I in Italian are not compatible. So, the morphological word consisting of the verbal stem and the inflectional affix cannot simultaneously be a V° and an I°.

Suppose the verbal features project. This would give rise to a full fledged

VP. The VP would need an argument to assign a theta/role. Intervention of an I-projection would make this possible (Reuland 1985b). The subject would be either PRO or a lexical subject. So the 'lower' part of the construction would be just like the English gerunds:



This accounts for (28)i and iii. But (28)v indicates that 'upper' half of the Italian NI differs from the English gerunds, in that they do have the internal grammar of an NP.

Again the only candidate to act as a set predicate to the variable (x) as in (24) is IP. But the nominal features of the V-I complex cannot be distributed over a zero segment that is a sister to IP, since the adjacency requirement (22) would not be met. (V and N are equally incompatible in English and Italian.) So Reuland's account is not sufficient here.

Suppose the variable would be construed as a sister to the V-I complex itself, as in (25). Then one would expect a fully nomial construction, as in "Tom's refusing of the offer" (= (4)ii). That is, the verbal features would not project, the direct object would not receive objective case from the verb, so a dummy case assigner would show up. None of this happens however. In fact, the Italian NI never seems to be so nominal, that the direct object can only appear in a post-head PP-construction. So it would be undesirable to allow anything but the verb to project in these cases ¹², unless one would accept simultaneous projection in Italian. This again is excluded by Reuland's assumptions, since Italian is a SVO language, in which the heads of the verbal, inflectional and nominal projections are incompatible.

5. A Unified Approach.

In general there are two aspects of mixed nominal-verbal constructions: first one can have seemingly ordinary NP's with verbal features (eg. an adverb) present on the inside, secondly, full fledged VP's with nominal features

(eg. an adjective) on the outside. In the first case the peculiarity consists in the verb's projecting its features within an NP, in the second case it consists in NP-VP-predication having the internal grammar of an NP.

In English neither of these mixed forms is possible, in Dutch both are, and in Italian at least the latter is, and probably as a rule both are:

- (38) i *The $[v_{\nu}]$ persistently refusing of the offer.
 - ii Het [v constant hooghouden] van de bal.
 - iii a. Quel continuo $\begin{bmatrix} v \end{bmatrix}$ ricorrere frettolosamente a soluzioni di ripiego. b. *L' $\begin{bmatrix} v \end{bmatrix}$ avviarsi lentamente del treno.
- (39) i *The persistent [V] refusing the offer.
 - ii Dat vervelende [$_{\mathbb{V}}$ de bal hooghouden.]
 - iii Il continuo [v ricercare la verità.]

In Italian, as said before, the picture is obscured because the default procedure for saving a case-less direct object NP in a PP is absent in NI's. This might indicate that the verb is 'strong enough' to under all circumstances assign case to its direct object. In deverbal nouns the default procedure exists (cf. 27) which indicates that the affix in nominalized infinitives is not of the same status as the affix in deverbal nouns, in other words, not +N (+A) but oN (oA). On the other hand, though the affix is oN and in this way enables the V to project, this apparently does not result in a full fledged VP, since adverbs are not admitted in (38)iib. In these constructions, that is NI's of intransitive and intransitive-reflexive verbs, post-head PP's expressing the subject are possible. So in this case one would gladly describe the affix as being opaque (that is, +N or +A). Still, relating opacity to transitivity would be ad hoc. I have no solution for this problem.

In any case I would like to hold on to Lieber's percolation conventions, so making use of the distinction opacity/transparency will be unavoidable. In section 2 I made a distinction between an opaque and a transparent affix "-ing" in English gerunds, the former giving rise to a fully nominal gerund, the latter projecting indirectly via the the zero Infl-position, resulting in an IP, and permitting a full fledged VP within.

This distinction I will not make for the "-en" affix in Dutch NI's. Instead I will claim that the Dutch "-en" is always transparent. This explains the fact that a full fledged VP in Dutch NI's is always possible, even if eg. the direct object is not expressed as part of the VP as in (17). As for Italian NI's, I will proceed in the same way: the affix never blocks the verb in exerting its force, ergo the affix never is +N or +A. Therefore the affix is in both languages oA (following from now on Reuland's (1985) feature system)

and the verbal features project in the first instance. The oA feature that the construction as a whole needs in order for it to be able to appear in an argument position will, as in English gerunds, project from the zero-INFL position independently needed to stop the VP from an infinite regress. This of course is incompatible with the considerations at the end of section 3 regarding the status of the canonical Infl-position in Dutch. Taking Stowell seriously, it is highly unlikely that this position stands out as a real thing in the linguistic conscience of the Dutch child. But I don't think that simultaneous projection can be reconciled with Lieber's percolation conventions. ¹³ Of course this problem can be solved either way, but the point is, that simultaneous projection, though preferable for principled reasons, can no longer be part of the explanation of the differences between Dutch and English, since it won't explain the differences between English and Italian. So even if it could be reconciled with Lieber's percolation conventions this will only improve our description, not our explanation.

Therefore I assume that in general in Dutch and Italian NI's the same thing happens as in English 'verbal' gerunds: the relevant features of the affix project indirectly through its relation with the canonical Infl-position. These assumptions explain the first part of the question: the impossibility of having verbal traits in English 'nominal' gerunds, and the occurrence of these traits in English 'verbal' gerunds and Dutch and Italian NI's. The following trees illustrate this analysis of NI's and gerunds up to the IP-node:

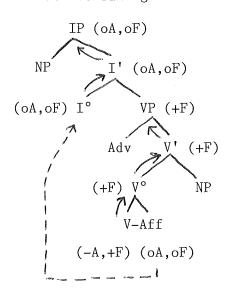
(40) i English a. 'nominal' gerunds

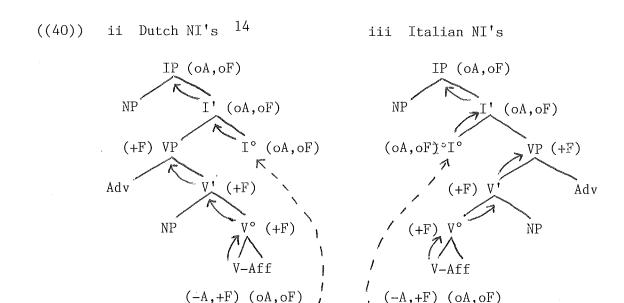
* NP (+A)
Det N' (+A)
Adv N' (+A)

(+A) N° PP

V-Aff
(-A,+F) (+A,-F)

b. 'verbal' gerunds





The second part of the issue, that is why English 'verbal' gerunds cannot have the internal structure of an NP while Dutch and Italian NI's can, is reduced in Reuland (1986b) to the difference between SVO and SOV languages. In his description the nominal features determining the N-projection in the end were part of the inflectional affix and had to spread over to a nearby null segment, since direct projection was impeded by the circumstance that N and V take different positions in their respective projections.

This spreading was submitted to an adjacency requirement. In SVO languages the direct object intervenes, so that wherever the relevant zero-segment would be, the adjacency requirement would not be met.

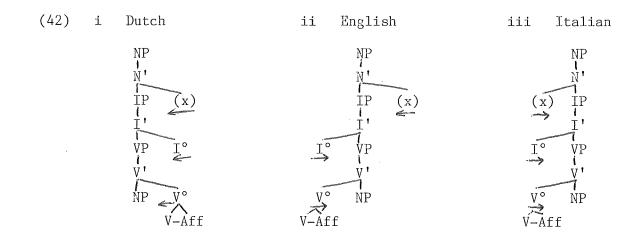
The facts of Italian suggest that we drop the adjacency requirement. This does not necessarily mean that we lose the reference to the SVO-SOV distinction. What is infact expressed in the reference to the SVO character is the directionality of government, not the result of that directionality, viz. that in certain constructions direct objects appear to the right of the verb. An adjacency requirement could never explain the fact that the behaviour of gerunds does not change when the direct object for some reason isn't present:

So we may still assume that somehow directionality is involved.

Then if we follow Reuland in that the nominal aspect of the construction as a whole derives from the affix and may distribute from under the V° -node over the zero segment associated with the variable (x) in (24), may assume that this distributing has the same properties as the distributing of inflec-

tional features over the canonical Infl-position. This was taken to be an instance of 'feature sharing', always possible between two elements standing in a dependency relation to one another. One of the properties of this dependency relation is, that it be subject to locality principles, that is, the relation holds only between two elements within the same domain.

Now continuing this line of argument the facts would follow, if for some reason in English the domain cannot be extended beyond the IP-node, whereas in Dutch and Italian it can. According to Koster (1986), based on Kayne (1983), domain extension has everything to do with directionality of government. Central to the idea is Kayne's insight that "the direction in which the successive projections are governed plays a crucial role in domains the size of which exceeds the size of the minimal X^{Max}" (Koster, 1986, p. 21). All we need to apply this insight to the constructions at hand, is the claim that the variable (x) acts like a governor in this respect, and that in Italian, as might be deduced from the standard order Noun-Adjective in that language (Reuland, p.c.), the variable in NP's precedes the N°. Then the differences follow immediately:



The relevant domain can now be extended to the upper NP-node in Dutch and Italian, so that a dependency relation between (x) and the inflectional affix can exist.

Interesting though this may be, I don't think it's at all without problems. First of all, the assumption regarding the position of the variable in Italian is ad hoc, and I don't see why the standard order of Noun and Adjective can be more of an indication than order of Verb and Object, or Preposition and Complement, which is the other way around.

Secondly, it is not clear whether the variable should be of the same syntactic status as eg. I $^{\circ}$ or V $^{\circ}$. Actually, I'm not sure about the syntactic status of (x) in (24) at all. And domain extension is a typical S-structure

phenomenon. 14'

Finally, it is questionable whether it is by way of distribution of features along the lines of $(22)^{15}$ that the affix determines whether or not the construction as a whole can have the internal grammar of an NP. In the version just exposed, the affix should have at least inflectional and nominal properties, which both can seperately be realized on an applicable null-segment. This means that the Verb-Affix complex would at least have a tripartite character. I find no evidence for this view. It seems more in line to consider the affix as a single element, a realization of inflection, just as in finite constructions, only differing as to Tense and Finiteness. And if it's a single element there can only be one antecedent (cf. (10)), and distributing features over a null-segment can only happen once. As every realization of INFL, the affix will have the class properties (oA,oF) (Reuland, 1985b), which will be percolated through the zero-INFL position as described before, so that the IP-node will in all cases be (oA,oF) (cf. (40)). This will account for the possibility of the construction to appear in argument positions in general, and it will be on the basis of the feature specification of this IP-node that the presence or absence of a formal argument (x) must be determined.

For these reasons an explanation along the lines of directionality cannot be the definite answer to our question.

Instead I will discuss a proposal that follows the idea that difference between English gerunds and Dutch/Italian NI's concerning the internal grammar of the construction as a whole will have to be a direct result of some feature of the IP-node in these languages.

For this to work, the realization of INFL in the English gerunds and in the Dutch and Italian NI's should be demonstrably different. As for Tense there can be no difference. However in Reuland (1983) it is argued that "-ing" in English gerunds is in fact finite, mainly for reasons of case assignment to the lexical subject within the gerund. As for the categorial status of the construction as a whole, Reuland argues convincingly that it must be an \overline{S} , that is, COMP must be present. This is in line with earlier studies on the subject, a. o. Horn (1975), Williams (1975), and to some extent Chomsky (1972).

These propositions make sense when compared to Reuland's article on the features of the set of categorial heads and licensing relations in syntactic structures (Reuland 1985b). Treating the properties of INFL and I-projections, specified by the feature combination (oA,oF), he states that "given the absence of either positively or negatively specified class features, the categorial specification by itself does not determine the manner in which the predication as a whole is to be licensed. (...) One way for a predication to be licensed is by construing it with Comp, with Comp being identified

by linking with constituents contained in the predication, eg. Tense. Another way is for the predication itself to acquire a categorial status which allows licensing. This is precisely the effect, I claim, of the various kinds of non-finite inflection." (Reuland, 1985b, p. 71) ¹⁶ If this effect is confined to non-finite inflection, it follows that predications with finite inflection will have to be construed with Comp. I will not go into the details of such a point of view, but merely conclude that in this way a relation is established between both assumptions in Reuland (1983) mentioned above: if Comp can be identified on the basis of the feature Finite in INFL, or alternatively, if +Finite I-projections cannot be construed with anything but Comp, and if NP-ing constructions contain a +Finite inflection marker "-ing", then NP-ing constructions must be clausal.

In Dutch and Italian NI's on the other hand the inflection marker is uncontroversially non-finite. Still on the basis of its oF character it will need at least a formal argument. 17 This it can only find in the variable (x) in (24), the presence of which will turn the construction as a whole into what is traditionally called an NP.

In this way, a difference is established between English gerunds and Dutch/Italian NI's solely on the basis of the features of the IP-node involved: English gerunds are Comp-projections and Dutch and Italian NI's have the internal grammar of an NP because of the \pm -Finite character of the realization of INFL in these constructions.

However there are a few problems concerning this analysis.

First of all there seems to be quite a unanimity in recent years (cf. Horn (1975), Williams (1975), Reuland (1983)) about the difference between POSS-ing and NP-ing constructions: only the latter are taken to be clauses (\overline{S}) . This is at variance with Chomsky's (1972) vision, that POSS-ing constructions are clausal too, the main argument being that the internal structure of an NP is lacking, and with the vision expressed in Chomsky (1973), that the POSS-ing constructions contain a zero-Complementizer. If indeed the choice is between \overline{S} and NP, the choice is difficult, also because the subject of the gerund in POSS-ing constructions has none of the properties of the Noun Phrase's Determiner (Williams (1975)).

Perhaps the issue is clouded by taking all occurrences of "NP's V-ing" as belonging to one and the same class. Replacing the genetive case NP's in (4) by NP's in objective case leads to ungrammaticality in the 'nominal' gerunds, but not in the 'verbal' ones:

- (43) i Him refusing the offer surprised me.
 - ii *Him refusing of the offer surprised me.
 - iii Him persistently refusing the offer surprised me.
 - iv *Him persistent refusing of the offer surprised me.

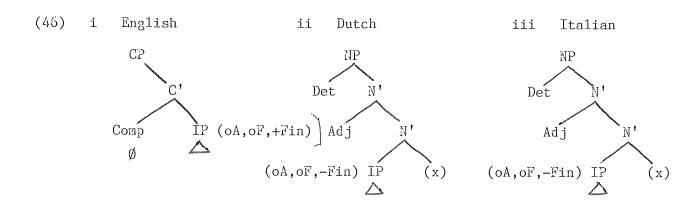
Further investigations are needed before these things can be cleared up. As it stands, the explanation based on the \overline{S} -status of NP-ing constructions explains al least the differences between Dutch and Italian NI's on the one hand, and the large group of English gerunds with lexical subjects in objective case on the other hand. Perhaps the analysis can be extended so as to include 'verbal' gerunds with a lexical subject in the genitive case as well.

Another problem is, that Rizzi's Aux-to-Comp analysis of Italian gerunds (cf. (44)) cannot carry over to Italian NI's (45), since this analysis makes crucial use of a COMP-position for the Auxiliary to land on in order to assign nominative case to the lexical subject (cf. Salvi (1985)):

- (44) Avendo Mario scritto questa lettera...
- (45) L' aver Mario scritto questa lettera...

A Comp-projection can never be construed with a formal argument because its feature specification is -F. Therefore if we are to maintain the Aux-to-Comp analysis in sentences like (45), we will have to deny (35) the internal structure of an NP. This again is excluded by the presence of the determiner and the prohibition against vacuous quantification in natural languages (Chomsky (1932)). ¹⁸ So reference to Aux-to-Comp is incompatible with the analysis given so far and with the principles underlying it. ¹⁹ Therefore I'm inclined to drop the Aux-to-Comp explanation of case phenomena in Italian NI's.

If this is all correct, the difference between English 'verbal' gerunds and Dutch/Italian NI's concerning their upper, 'nominal' half can be represented as follows:



Summarizing: in English gerunds, the affix is either (+A,oF) or (oA,oF). If it is (+A,oF), these features project, giving rise to an N-projection, with the internal structure of an MP. As a result, no verbality is ever attested inside this kind of gerund. If it is (oA,oF), the verbal features

project, giving rise to a full fledged VP. The inflectional features, among which +Finite, are shared with the zero INFL on the canonical Infl-position and hence projected, the I-projection relieving the V-projection, allowing a lexical subject, and requiring construal with Comp. As a result, the internal structure of an NP is lacking, the construction as a whole being an \overline{S} or a CP.

In Dutch and Italian NI's, the affix is always (oA,oF). Therefore the verbal features always project (perhaps with some proviso for intransitive and intransitive reflexive verbs), so that verbal features can always be present 'inside'. The inflectional features go the same way as in English, at least in Italian; in Dutch they may be taken along with the verbal projection line (cf. fn. 13). But contrary to English gerunds, '+Finite' is not part of the featurespecification of the realization of INFL in Italian and Dutch NI's. Therefore there is no feature present on the basis of which Comp might be identified, so the Infl-projection can only be construed with the formal variable (x) in (24). As a result these constructions always have the internal structure of an NP.

6. Conclusion.

In this way it has been shown possible to derive the various properties of the nominalizations in English, Dutch and Italian from the features of the categories involved, using standard percolation conventions, and the principle of feature sharing by two interdependent elements in the same domain. Moreover, this lends support to the Strong Lexicalist Hypothesis and to the position in which DS is not more than a derivative of S-structure.

But I don't think that these are the final words about these constructions. There still are a great many intriguing questions, concerning for example case phenomena within gerunds and NI's. Also in this paper the similarities of Dutch and Italian and the differences of these two languages with English are stressed; some attention to the similarities of the English and Italian constructions as opposed to the Dutch ones may yield interesting conclusions, too. Furthermore, this analysis makes some predictions about comparable constructions in other romance and germanic languages, which should be checked.

Finally, a number of questions vital to the explanation given here are unanswered: for instance, what is the exact nature of the POSS-ing constructions in (4), how is the difference between English 'verbal' gerunds and other CP's to be explained, and, more importantly, is the presupposed opacity and transparency of affixes in English, Dutch and Italian an inherent property, or a derivative of something else?

I hope to go into that some other time.

Notes.

1. It is not clear to me, at this instance, what factors preclude percolation of the features of an affix. Reuland (1986b) relates it to the syntactic status of an affix, and to directionality of government. Eg. if an affix cannot be said to 'be an X°' or if affix and stem have different directions of government, simultaneous projection is impossible. I'd like to for the moment keep simultaneous projection out of the description, but the above mentioned factors may very well come into play. For the time being I will use the term 'transparent' to cover up whatever may be the relevant factors impeding percolation.

A warning is at its place however. In his third percolation convention, Lieber describes a not-percolating affix as being of a \emptyset -category class. This \emptyset and the o-value used in Reuland's (1985b) feature system are of a completely different status, so that it is not enough to describe a not percolating affix as oA or oF, since this specification denotes a specific property of the affix's category, not the denial of some property, as in Lieber. Rather, the description as oA,oF of an affix follows from the assumption that it is an inflectional affix. The ambiguity would be solved if one were to say that inflectional affixes for some reason never project directly, and "-ing" in English gerunds can be both a nominal and an inflectional affix.

- 2. Subsuming for the moment E and CN.
- 3. Reuland (p.c.) suggests that the relevant features might be taken along with the verbal features, to surface later on when the latter are no longer relevant, in order for the thematic subject to receive nominative case. I don't think that this approach results in a clear difference with the Dutch facts, for which Reuland proposes simultaneous projection with in the end the same result.
- 4. The INFL-projection is needed to save the VP from an infinite regress. The VP (+F) requires an argument to assign a theta-role to. If no INFL-projection intervenes, a [xi NP VP] structure will result, technically a small clause; given that the predicate of the construction determines the categorial status of the whole in a small clause (Stowell 1981), Xⁱ will be a V-projection, needing another NP and so on and so on. For a full account: see Reuland (1985b).
- 5. As the reader may notice, this conclusion is not solid, since it might as well be CP, considering the options on p. 5. Both C and I are oA, which allows licensing as an argument.
- 6. Case assignment poses a minor problem to the SLP, easily overcome by replacing 'assignment' by 'checking', thus expressing the idea that case in a syntactic structure reflects a relation of a certain kind, to be distinguished from a morphological process.
- 7. Eg. case assignment. Furthermore, the possibility of having a determiner 'inside' the NI, as in "de bal" in (16), precludes considering the NI as a whole as an X° .
- 8. The determiner may in all cases be replaced by a subject-NP in the genitive case, as in English gerunds.
- 9. What this means is, that the inflectional element, even when it is a bound morpheme and, by the SLP, realized on the verbal stem, still stands out as an element of syntactic relevance, while the derivational affix no longer does so, because it does not satisfy the syntactic predicate 'is an Xⁿ'. Rather, Lieber-like/can be assumed to have already applied, in the lexical/morphological component, making the derivation an X° carrying the features of the affix.

rercolation

- 10. Translation: "Only the adjectives placed after the infinitive indicate a nominal use of that same infinitive, while the adjectives placed in front are not decisive in this question."
- 11. As for Salvi's explanation for the absence of pre-head adjectives in NI's containing a lexical subject, it may very well carry over to an account that takes these adjectives to be exactly what they seem to be, that is, adjectives. These 'generic' adjectives generally modify an action as such, that

is, regardless of its agent; so the action does not have an event-reading (cf. Skytte (1983)). When the subject is present, the event-reading is obvious and a generic modifier would be odd. Taking adverbs modifying a VP as 'generic', that is not modifying an event but an action as such, the correspondence to 'generic', anteposed adjectives would be inherent. A similar line of argument might explain the restriction on the determiner when the NI contains a lexical subject (in that case, only 'il' is allowed). The event expressed by an NP-VP predication is unique, and a determiner deying this uniqueness ('un', 'quel', 'questo') is not to be expected. What I'm trying to say is, that these subregularities, including the one Salvi sought to explain on syntactic grounds, are of a semantic nature, and syntactically irrelevant.

12. Only in the case of a nominalization of intransitive or intransitive reflexive verbs, as in (27), verbal features do not seem to project.

13. Perhaps this is not unfeasible. Lieber's third convention states that unspecified affixes can be skipped. Perhaps when these conventions are to apply in syntax, this skipping cannot be done gratuitously, but the skipped element has to show up somewhere else. This can be done by spreading the relevant features to a near enough zero-segment, as in the description of the English 'verbal' gerunds, or, when such a segment is lacking, as is supposedly the case in Dutch NI's, by taking them along as in Reulands description. IP (oA,oF)

VP/I (+F)/(oA,oF) Adv V'/I (+F)/(oA,oF)

V°/I° (+F)/(oA,oF) V-Aff

14. Or, with simultaneous projection:

14'. Following Haverkort (1986) the directionality in the extension of domains is of no relevance when the governor in question is not a structural case assigner. This would mean that (x) must be a structural case assigner if the analysis is to remain viable.

15. Or rather a version of (22) in which adjacency is replaced by

locality as in (10).

16. Both COMP and the formal argument (x) are (oA,-F) in Reuland (1985b).

17. The o-specification does not indicate an optionality of some sort, but has a meaning of its own. It indicates that the structural environment for licensing as a functor should be present, i.e. that there has to be at least a formal argument.

13. Of course the seemingly structural absence of an adjective in sentences like (45) can be taken to indicate something of a lacking internal grammar of an NP. For this I refer to fn. 11.

19. Notice that Aux-to-Comp should be suspect in Koster (1936) too, since COMP in general is not 'strong' in Italian, and only strong categories can be filled.

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