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A mixed extended projection: The nominalized infinitive in spanish and italian.

0. Introduction¹.

The aim of this article is to provide an analysis of the categorial status of Spanish and Italian infinitival constructions introduced by a determiner, as in (1a-b). According to Grimshaw (1991), some functional categories are inherently verbal and others are inherently nominal; in this work I will suggest that in sentences like (1) the infinitive is a verbal category (V°) associated with one or more nominal functional categories. Moreover I will prove that the infinitive in structures like (1a-b), is not a noun, but a verbal form.

- (1) a. Escuchábamos el silbar de los pájaros.
b. Ascoltavamo il fischiare degli uccelli.
(We listened the whistle-INF of the birds).

Grammarians from different schools (and from widely different points of view) have considered the infinitive a mixed category [$\pm V$, $\pm N$] or [+V, +N], which in certain contexts undergoes the neutralization of one feature. Spanish traditional grammarians include the infinitive in the class of nouns for four reasons: (i) infinitival clauses appear in canonical nominal positions (1); (ii) the infinitive does not express agreement and tense. (iii) it appears with a determiner, as in (2a); (iv) in some context it is difficult to differentiate its meaning from that of the corresponding abstract action noun (2a) vs. (2b).

- (2) a. Aquel encantador silbar de los pájaros.
(The lovely whistle-INF of the birds).
b. Aquel encantador silbido de los pájaros.
(The lovely whistling of the birds).

I claim that the infinitive is not a mixed or neutralized lexical category, because in colloquial present-day Spanish it never exhibits at the same time both the properties of verbs and those of nouns. I will show that the verbal and nominal properties of the Spanish infinitive are in complementary distribution. In other words, we will see that the syntactic distribution of the two types of infinitive (nominal and verbal) is not the same in Spanish. This shows that the Spanish infinitive can project two different structures:

- (i) A *verbal* one, as in (3a), with only verbal characteristics: The infinitive may be a compound form, allows for a Nominative subject, it allows for a clitic pronoun, and it can introduce a direct object;
(ii) A *nominal* structure, as in (3b), where the infinitive introduces its thematic subject by mean of a preposition and it is modified by an adjective (all of them are nominal

¹ This work is a revised version of a previously published paper (Pérez Vázquez, 1999). I am grateful to Valentina Bianchi and P.M Bertinetto for useful discussions and suggestions.

properties). The sentence in (3c) is ungrammatical because two nominal properties (a possessive and an adjective) cooccurring with a verbal property: a direct object.

- (3) a. El haberme murmurado Juan esas palabras dulces.
(The have-INF whisper Juan(Nominative) these sweet words).
- b. El murmurar delicado del mar.
(The whisper soft of the sea).
- c. *Su delicado murmurarme esas palabras dulces.
(His(possessive 3°) soft whisper-INF(to me) these sweet words).

In Italian, the distribution of nominal and verbal properties is not in absolutely complementary distribution (4c), but they are not in aleatory combination either.

- (4) a. L'aver egli mormorato parole dolci.
(The hav-INF he to whisper sweet words).
- b. Il mormorare sommesso del mare. (Zucchi 1993: 220).
(The whisper-INF soft of the sea).
- c . Il suo delicato mormorarmi parole dolci.
(His(possessive 3°) soft whisper-INF(to me) sweet words).

I claim that both in Spanish and in Italian, the infinitive is not a mixed or neutralized lexical category; it is lexically a verb and projects a VP. I will however suggest that the infinitive constructions in (1-4) involve what Grimshaw (1991)² calls a "mixed extended projection", a structure in which a verb is associated with one or more nominal functional categories.

An important facet of my analysis is that it predicts that not all combinations of nominal and verbal properties are possible in Italian infinitival constructions. The difference between Spanish and Italian resides in how much nominal functional categories can modify the infinitive in each language. The article is organized as follows: Section 1 is devoted to prove that there are two different infinitival structures in Spanish, and three in Italian. In section 2, I will discuss the categorial status of the Spanish and Italian infinitive and I will point out the differences between nouns and the so-called nominal infinitives. Section 3 presents the derivation proposed for sentences like (1a-b) and some of its consequences.

² Grimshaw (1991) proposes that there are no mixed extended projections, so that nominal functional categories cannot be associated with a verbal projection; but according to Borsley & Kornfilt (2000), it is difficult to reconcile the sentences like (1-4), with nominal and verbal properties, with the assumption that there are no mixed extended projections.

1. The Data

As a starting point, let us assume that, in Spanish and Italian, the selection of direct objects is a verbal property, because only the verbal forms can assign accusative Case without prepositions (5a-b); a further verbal property is adverbial modification:

- (5) a. El silbar esas canciones alegremente.
b. Il fischiare quelle canzoni allegramente.
(*The whistle-INF these songs merrily*).

On the contrary, let us assume the following properties as inherent nominal infinitives: A subject introduced by a preposition (*de* in Spanish, by *di* in Italian (6a-b)); and postverbal adjective modification³.

- (6) a. El silbar alegre de los chicos.
b. Il fischiare allegro dei ragazzi.
(*The whistle-INF happy of the kids*).

I shall refer to the former type of infinitive (phrases like (5a-b)) as "verbal infinitive" and to the latter type (6a-b) as "nominal infinitive"⁴. At any rate, I consider that the infinitive is a verbal form, which has verbal categorial status, but it can project two categorial types of structures in Spanish: Nominal one and verbal one; and three types in Italian: A nominal, a verbal and a mixed structure.

1.1. Two Infinitival Structures in Spanish

The nominal infinitive only allows for nominal characteristics: (i) adjectival but not adverbial modification (7a) vs. (7b); (ii) it allow the following range of determiners: Definite article, demonstratives, indefinite article, as shown in (7a); (iii) the subject can also be realized in the form of a possessive (7b); (iv) inherent and reflexive clitics pronouns⁵ can appear in nominal infinitive structure, but argumental clitics cannot (7b) vs. (7c); (v) the infinitive in nominal construction cannot realize all their arguments: It cannot occur with a direct⁶ or indirect object, as shown by the ungrammaticality of (7d); (vi) finally, it is impossible to realize the direct object by a de-PP (7e).

³ The preverbal adjective modification is possible also with the Italian mixed infinitival construction.

⁴ The relevant properties of nominal and verbal infinitive have been mentioned in Plann (1981), Hernanz (1982), Bosque (1989); De Miguel (1996), Hernanz (1999) and Pérez Vázquez (2001) for Spanish; Salvi (1982) and Zucchi (1993), for Italian.

⁵ Burzio (1986) has argued that, while non reflexive-clitics bear a theta role (they are arguments of the verb) reflexive clitics may be analyzed as grammatical markers bearing no theta-role. Therefore, the fact that inherent reflexive clitics can occur in nominal infinitive structure is not surprising, since they are not arguments of the verbs (see below for a further discussion).

⁶ The permitted direct object is restricted to "bare NP", unlike a determinate NPs; as suggested by Bosque (1989), this is a strong indication that there is lexical incorporation of the NP to the verb.

- (7) a. Aquel/ese/este/un/el lamentar (*desesperadamente) de dos pastores.
(That/this/a/the lament-INF (desperately) of two shepherds).
- b. Su desesperado lamentarse.
(his despair lament-INF themselves(reflexive clitic)).
- c. *Ese desesperado lamentarlo.
(That despair lament-INF it(acc.clitic)).
- d. *Aquel lamentar las tormentas de dos pastores.
(That despair lament-INF the storms of two shepherds).
- e. *Aquel lamentar de las tormentas.
(That lament-INF of the storms).

In the verbal structure (i) the infinitive can be negated; (ii) it allow compound, passive and periphrastic forms (8a); (iii) we also have adverbs but not adjectives (8a-b); (iv) as we would expect, direct objects take the same form construction as with finite verbs (8c); (v) a further point to note is that we also have examples with an overt postverbal nominative subject (8c). In this case, the sole nominal element which can modify the infinitive is the definite article *el* (*the*).

- (8) a. El no haberse lamentado desesperadamente indica que no es importante.
(The no have-INF lament desperately indicates that it isn't important).
- b. El no haberse lamentado (*desesperado) indica que no es importante.
(The no have-INF lament (despair) indicates that it isn't important).
- c. El lamentar la familia lo sucedido. (De Miguel, 1996).
(The lament-INF the family(nominative) the(neut.) happened).

Another important difference between the nominal and the verbal infinitive clauses concerns their *aktsionsart*: The former has atelic on-going interpretation. In contrast, the verbal infinitive construction has a factive interpretation⁷ (see De Miguel, 1996 and Demonte & Varela, 1997).

⁷ In order to explain this different interpretation, De Miguel (1996) has proposed that the infinitive in the nominal structure projects an AspP which is specified with the feature [-perfective]. In contrast, the infinitive in the verbal construction projects an AspP specified as [+perfective] and a TP [+ant].

1.2. Three Infinitival Structures in Italian

In Italian, the purely verbal structure is the so-called "aux-to-comp" construction (Rizzi, 1982); in this case (i) the infinitive can be modified by adverbs but not by adjectives (9c); and (ii) its subject is nominative (9a-c), like the Spanish verbal form⁸; (iii) it cannot introduce its subject by a preposition; and (iv) the subject cannot be realized in the form of a possessive (9b); in addition to the Nominative subject, (v) there is a direct object and there could be an indirect object as shown in (9a). As pointed out by Zucchi (1993: 229), the "aux-to-Comp" construction cannot be selected by a demonstrative (9b), because this is a nominal property. In this structure, the sole nominal category which can modify the infinitive is the definite article *il* (*the*).

- (9) a. L'avere egli compiuto i suoi primi studi in Francia (Zucchi, 1993).
(The have-INF he done his first studies in France).
- b. *Un certo/questo/quell'aver egli compiuto i suoi primi studi in Francia.
(A certain/this/that have-INF he done his first studies in France).
- c. L'aver egli compiuto (velocemente/*veloce) i suoi primi studi in Francia.
*(The have-INF he done (fastly/*fast) his first studies in France).*

In (10) instead all categories modifying the infinitive are nominal: (i) the infinitive can be selected by a demonstrative, definite or indefinite article (10a); (ii) the subject is introduced by the preposition *di* ("of"); (iii) it can be modified by a preposed or a postposed manner adjective (10b), but not by adverbs (10c). As in the Spanish nominal structure, inherent and reflexive, unlike argumental clitics, are able to appear in this construction (10c). We will call this structure "nominal infinitive".

- (10) a. Quel/il/un certo/questo disperato lamentare di due pastori.
(That/the/a certain despair lament-INF of two shepherds).
- b. Il suo (disperato) lamentare (disperato).
(The his lament-INF despair).
- c. Il lamentarsi (*disperatamente) di due pastori.
*(The lament (*desperately) of two shepherds).*

The third construction in Italian is a "mixed infinitive" (11); (i) it can be modified by possessives; (ii) it can be introduced by demonstratives and (iii) it admits a preposed adjective (all of them are nominal properties). But on the other hand, like in the verbal

⁸ A difference between Spanish and Italian infinitive sentences with Nominative subject is that in the former language, the DP subject occupies the position between auxiliary and participle (i); in Spanish, except that in exclamative and interrogative clauses, like (ii-iii), the subject lies instead in postverbal position (iv):

(i). L'aver Piero ricercato la verità. (Rizzi, 1982) (*The have-inf Piero to look for the truth*).
(ii). ¿Yo buscar la verdad? (*I to look for the truth?*)
(iii). ¡Ella buscar la verdad! (*I to look for the truth!*)
(iv). El haber buscado Pedro la verdad. (*The have-inf to look Pedro for the truth*).

structure seen in (10), the infinitive can be negated, it allows for compound, passive and periphrastic forms, it may occur with argumental clitics and with a direct object.

- (11) a. Quel/il/un certo/questo disperato lamentare i fatti (*di due pastori).
*(That/the/a certain despair lament-INF the facts (*of two shepherds)).*
- b. Quel (disperato) aver lamentato (*disperato) i fatti.
*(That/the/a certain (despair) lament-INF (*despair) of two shepherds).*
- c. Il suo non lamentare disperatamente i fatti (*di due pastori).
*(The his lament-INF desperately the facts (*of two shepherds)).*

2. The so-Called Nominal Infinitive Is not a Noun.

In this Section, I will argue that the infinitive is not a nominal category (N°), but a verbal form in the lexicon. Otherwise, according to Anula & Lagunilla (1994) it can be projected in a nominal construction.

The first difference between canonical noun and a nominal infinitive is that the latter does not admit plural inflection⁹, as we can see in (12a), while the corresponding action noun can be pluralized (12b).

- (12) a. *Los silbares de los pájaros.
a'. *I fischiari degli uccelli.
(The whistles-INF of the birds).
- b. Los silbidos de los pájaros.
b'. I fischi degli uccelli.
(The whistles of the birds).

The nominal infinitive accepts the reflexive or inherent pronoun *se* in Spanish (13a) *si* in Italian (13b), but with nouns these pronouns are impossible (13a-b) vs. (13c-d):

- (13) a. Ese descuidado afeitarse de Juan. (De Miguel, 1996).
b. Quel trascurato radersi di Giovanni.
(that careless shave-INF-himself of John).
- c. **Ese descuidado afeitadose de Juan.
d. **Quella trascurata rasaturase di Giovanni.
(That careless shaving-himself of John).

⁹ It is possible to pluralize the "false infinitives" like (i-ii), which are etymological infinitives, but in present day Spanish they are incorporated into the lexicon of the language of canonical nouns (see Varela, 1979).

- (i) El deber/los deberes.
(the job/the jobs)
- (ii) El cantar/los cantares.
(the song/the songs)

The nominal infinitive cannot introduce its direct object by a PP, but this is possible with nouns, as shown by the contrast between the examples in (14a-b).

- (14) a. *El construir de la ciudad.
a'. *Il costruire della città.
(The build-INF of the city).
- b. La construcción de la ciudad.
b'. La costruzione della città.
(The building of the city).

And finally, the infinitive in nominal structure can introduce an incorporated bare-NP direct object without preposition:

- (15) a. Ese continuo beber cerveza de Juan. (Bosque, 1989).
a'. Quel continuo bere birra di Gianni.
(That continuous drink-INF beer of John).
- b. *Esa continua bebida cerveza de Juan.
b' *Quella continua bevuta birra di Gianni.
(That continuous drink beer of John.).

All these differences between the “nominal infinitive” and nouns lead us to propose that the infinitive, unlike the nouns, has a minimal verbal projection; I propose that the non-finite verb projects a VP, unlike the nouns.

3. Mixed Extended Projections.

In order to explain these data, I will adopt the hypothesis of Borsley & Kornfilt (2000). According to these authors, the nominalization of a verbal form can be headed by a verbal non-finite predicate (with the features [+V, -N]). That is, the non finite verbal form can project a VP in the low part of the tree, however it can be modified by nominal functional projections in the high part of the construction.

The mentioned authors propose that a structure of the kind (16a) will be well formed because the nominal functional (NF) categories precede the verbal functional (VF) categories. On the contrary, a construction like (16b), where we find NFs under the VFs will be ill-formed.

- (16) a. [NF [NF [NF [VF [VP]]]]].
b. *[VF [VF [NF [NF [VP]]]]].

The authors analyze, among other structures, the "poss-ing" English constructions like (17), where we find nominal and verbal characteristics in the same sentence: In the example (17a) the "poss-ing" construction appears in a canonical nominal positions, the

head of the sentence is a non finite verb and the subject of gerund has the marking characteristic of possessors within a nominal phrase. In all other respects, it has a verbal internal structure, because it licenses a direct object and we have adverbs and not adjectives.

- (17) a. [John's criticizing the book repeatedly] was annoying.
 b. we talked about [John's criticizing the book].

Following in essence Abney (1987), the mentioned authors analyze the "poss-ing" construction as follows:

- (18) [DP John's_i [D° e [VP t_i [criticizing the book]]]].

The analysis predicts that subjects have possessive marking since they are in the specifier position of a nominal functional category (in Spec/DP) and the objects have the same form as with finite verbs; the analysis predicts also that we have adverbs and not adjectives, if we assumes that adverbs modify VPs while adjectives modifies NPs. In (18) there is no verbal function category above the VP, because the direct object is in a canonical position; but if we adopted Chomsky's (1993) view that objective case is licensed in the specifier position of AgrO, we would have one VF category above the VP.

The phrase of the kind (18a) could be translated in Spanish with *El criticar Juan el libro repetidamente* (*The to criticize Juan the book repeatedly*) with a no-finite verbal form (infinitive instead of gerund) and with a lexical subject, like in English. That is, the structure shown in (18) corresponds to a verbal infinitive construction of the kind seen in (8), where the definite article, that is a nominal characteristic, precedes the verbal projections.

3.1. An Analysis of Spanish and Italian Nominal Infinitive Structure.

Following the idea of Borsley&Kornfilt (2000) I will show that also in the nominal infinitival structures we have seen there are no verbal functional categories above the VP projected by the infinitive: In fact, I will demonstrate that above the VP there are only nominal functional categories.

I will adopt the hypothesis that the infinitive is a verb (V°). In other words: both the root and the derivational affix of the infinitive have verbal status [+V,-N]. I assume in agreement with Anula & Lagunilla (1994) that the infinitive is always a verbal form, but it can be embedded in a nominal projection. Therefore, if the infinitive is the head of a VP, it is not surprising that it can present some characteristics of a finite form like an inherent and reflexive clitic pronoun and an incorporated direct object (both incorporated to the head V°).

In (19b) I present the structure proposed for (19a): The infinitive projects a VP that is selected by a functional projection that I call InfP (infinitive phrase), where PRO receives

Null Case; it can be proposed that in this projection the infinitive results to be neutralized¹⁰. Above the InfP there is a nominal functional projection, which we will call I_NP (inflectional nominal projection); in this projection the infinitive results to be nominalized¹¹.

This nominalization process takes place in a low level of the tree, because, as we have seen in section 1, the nominal infinitive cannot be negated, cannot be modified by adverbs and it does not allow compound, passive and periphrastic forms; that is, it cannot manifest aspect morphologically. Therefore it cannot project a NegP, nor a TP nor an AspP. In (19b) the direct object is incorporated to V° (see note 6); that is, in this structure also the verbal category Agr_oP is lacking.

- (19) a. Su continuo beber cerveza.
a'. Il suo continuo bere birra.
(his continuous drink-INF beer).
- b. [_{DP} Suj [continuo [_{INP} I_N° [_{InfP} PRO_j [_{Inf}[beber cerveza]_i [_{VP} t_j [_V t_i]]]]]]].
- b'. [_{DP} Il suoj [continuo [_{INP} I_N° [_{InfP} PRO_j [_{Inf}[bere birra]_i [_{VP} t_j [_V t_i]]]]]]].

The Spec of InfP is occupied by a null argumental subject (PRO). I assume, with Grimshaw (1990), that like in the “eventive process nouns”, the possessive pronoun indicates the position of an implicit argument coindexed with it. The possessive does not assign theta-role to PRO; and the same possessive, which is not an argument of the verb, does not receive Case from the infinitive¹².

When a possessive pronoun is not present, the subject of the infinitive (PRO) will receive an arbitrary or generic interpretation, as in (20b), or is controlled by an implicit or explicit argument of the matrix (20c)

- (20) a. [Su_i [PRO_i continuo beber cerveza]].
(His continuous drink-INF beer).
- b. [El [PRO beber cerveza hace daño a la salud]].
(The drink-INF beer injures the health).
- c. [El [PRO_i beber cerveza le_i hace daño]].
(The drink-INF beer injures him).

¹⁰ I follow Borsley & Kornfilt's idea that there are some apparently nominal functional categories appearing in a clausal construction which have in fact unspecified features about its categorial status.

¹¹ The mechanism of the nominalization of the VP infinitive is still unclear. I leave the explanation of this mechanism as a problem for future research. One possibility, as argued by Borsley & Kornfilt (2000), is that lexical categories should incorporate information about the functional categories with which they are associated. This might take the form of a list of features that must enter into a checking relation. Each feature would correspond to some functional category, and the list would determine what functional categories appear in the extended projection of the category. We could then allow a limited range of structures by imposing constraints on these lists. Specifically, we could stipulate that they either contain just features of the same type as the lexical category or features of the same type followed by features of one other type.

¹² I will assume with Zubizarreta (1987) and Giorgi & Longobardi (1990) that the possessive pronoun occupy a external position of the nominal phrase, and is coindexed with the PRO under c-command. (see Pérez Vázquez, 2001).

3.1.1. The Subject Introduced by the Preposition (*de/di*)

As we have seen in section [1], in the nominal infinitival construction, the subject of the infinitive can be introduced by a preposition (*di* in Italian, *de* in Spanish). In order to analyze this structure, I will not adopt the traditional idea that the PPs-subjects are generated to the right of the NP.

I propose instead that the infinitival subject is generated in the argumental position, where it is assigned a theta-role¹³. In this way, according to Borsley&Kornfilt hypothesis, the NF projections are generated over the VP but not under the VP.

I will adopt the derivation proposed by Kayne (1994: §8.1) for postnominal possessives in English and French in phrases like (21). I will assume the Kayne's analysis to explain the Case marking mechanism of the infinitival subjects.

According to Kayne, a sentence like *John's two pictures* can be analyzed as in (21a), with the subject in the SpecIP and the possessive particle ('s) in the head of the IP. When instead the possessive is prepositional, in examples like *two pictures of John's*, it has the structure in (21b). Kayne (1994) argues that in (21b) the phrase *of John's* is not plausibly a complement of picture (see Kayne: §8.1) and then, the adjunction to the right of *the two pictures* becomes impossible; Kayne interprets that in (21b) the NP *two pictures* is moved to Spec,DP and the preposition *of* is inserted in D°, in order to Case-license the NP *John*. The thematic relation between *two pictures* and *John* would presumably be established within IP.

- (21) a. [_{D/PP} D°/P° [_{IP} John ['s [_{QP} two pictures]]]].
b. [_{PP} Two pictures_i [_{P°} of [_{IP} John [_T 's [_{T_i}]]]]].

By adopting Kayne's analysis, a nominal infinitival structures like *el beber cerveza de Juan* or *il bere birra di Gianni* ("the drink-INF beer") has the structure in (22a-b); the infinitival phrase moves to the Spec of GenP (genitive phrase), equivalent to the PP in the Kayne's analysis, leaving the subject in Spec,I_{NP}P. The preposition *de/di* in Gen° assigns genitive Case to the subject in the Spec of INP.

- (22) [_{DP} [_{D°} el] [_{GenP} [_{InfP} t_i beber cerveza]_k [_{Gen} de [_{INP} Juan_i [_{infpt}]_k]]]].
[_{DP} [_{D°} il] [_{GenP} [_{InfP} t_i bere birra]_k [_{Gen} di [_{INP} Gianni_i [_{infpt}]_k]]]].

By adopting the structure (22), in the derivation of the nominal infinitive constructions, the nominal functional projections are over the verbal functional projections as predicted by the analysis of Borsley&Kornfilt (2000).

3.1.2. The Ungrammaticality of a Determined Direct Object.

As we have seen in Section 1, in the nominal structure, the infinitive cannot occur with an Accusative determinated NP object or argumetal clitic. I propose that the direct

¹³ Also Picallo (1991) assumes that the subject introduced by a preposition with deverbal nouns in Catalan is not adjoined to the right of the NP but it is generated in argumental position.

object is impossible in this construction because AgroP is not present: The sole verbal category that is projected in this construction is the VP. The ungrammaticality of argumental clitics in this structure can be due to the fact that clitics must be adjoined to an inflectional head (see Kayne, 1991; Cardinaletti&Starke, 1994) but they cannot be adjoined to the infinitive VP.

The inherent and reflexive clitics are possible because they are incorporated to the head V°, like the “bare-NPs” in sentences like *el beber cerveza de Juan* (“the drink-INF beer of John”) (see note 4). This is consistent with the hypothesis of Raposo & Uriagereka (1994) that the reflexive clitics are not realized in an independent category (as argumental clitics are), but they are internal to a VP node. Following Burzio (1986), the reflexive clitics are not arguments of the verb, but they are grammatical markers whose function is to indicate that the verb has undergone a lexical rule which deletes a theta-role of the verb.

Alternatively it could be hypothesized that the ungrammaticality of a definite direct object in the nominal structure is due at an aspectual restriction of the nominal infinitive. As I have mentioned in Section 1, the nominal infinitive in Spanish has an activity (atelic) aspectual interpretation. Following Verkuil (1972), a verb with a definite direct object denotes an atelic activity, as in (23a); on the contrary, a verb with a non determinate direct object denotes a non telic activity (23b). It may be account for why the phrase in (23a) is ill-formed: With the direct object *estas coplas* (“these songs”) the infinitive must be interpreted as a telic predicate. On the other hand, the infinitive with the “bare-NP” (23b) has an activity, non-telic interpretation. However this is an unsatisfactory explanation, because we have not found the same aspectual restriction in the Italian nominal infinitive, but the definite direct object is ungrammatical in Italian construction as well.

- (23) a. *El cantar estas coplas de Lola nos emociona.
(The sing-INF these songs of Lola moves us).

- b. El cantar coplas de Lola nos emociona.
(the sing-INF these songs of Lola moves us).

As we have seen in Section 1, the direct object cannot be introduced by a preposition¹⁴ either as it shown by the ungrammaticality of (24a). My analysis predicts also the ill-formed of a direct object introduced by a preposition because, as it is shown in (24b), the direct object would have to rise to Spec,I_NP jumping PRO, and this violates the “Relativized Minimality” (Rizzi, 1990), giving an ungrammatical result of the phrase.

¹⁴ I will not analyze here examples such as *ese afilar de cuchillos* (“that to-sharp of knives”) by Plann (1981). According to De Miguel (1996) it seems to be an isolated example. In fact the possibility of similar examples is excluded (i), and moreover the Italian counterpart in is ungrammatical (ii):

- (i) *Ese romper de vasos (De Miguel, 1996)
(that to-break of glasses).
- (ii) *Quell’affilare di coltelli
(that to-sharp of knives).

Demonte and Varela (1997) suggested that the complement introduced by the preposition *de* (“of”) in examples such as *ese afilar de cuchillos* (that to-sharp of knives) could be not a direct object, but a lexical derived subject.

- (24) a. *El destruir de la ciudad.
 a'. *Il distruggere della città.
 (*The destroy-INF of the city*).
 b. *[_{DP} el [_{GenP} [_{Gen^o} de [_{INP} [la ciudad]_i [_{InfP} PRO [_{VP} destruir _{t_i}]]]]].
 b'. *[_{DP} il [_{GenP} [_{Gen^o} di [_{INP} [la città]_i [_{InfP} PRO [_{VP} distruggere _{t_i}]]]]].

3.1.3. The Preposed and Postposed Adjective.

According to Cinque (1994), the attributive adjectives in Romance are generated on a left branch, in the nominal recursive functional projections (that he calls XP, ZP, YP, ...), over the NP, even when they appear to the right of the noun; Cinque derives the order “noun-adjective” in Romance via N-movement to a projection above the XP. As for the nominal infinitive, we can suppose that the XP where the adjectives are generated is projected the I_{NP}, thus in example (25a), the adjective is generated in the Spec of the nominal functional projection (XP), over the INP. In (25b) the infinitive has raised to the head of the ZP generating the order infinitive-adjective. When the subject of the infinitive is introduced by a preposition, as in (25c), the infinitival phrase, including the projection of the adjective, is moved to the Spec of the GenP.

- (25) a. [_{XP} X^o [_{ZP} lento Z^o [_{INP} [_{InfP} [_{VP} beber]]]]].
 b. [_{XP} [beber]_k [_{ZP} lento t_k [_{INP} [_{InfP} [_{VP} t_i]]]]].
 c. [_{GenP} [lento beber]_i [_{Gen^o} de [_{XP} t_i [_{INP} Juan t_i [_{InfP} t_i]]]]].

In conclusion, in the nominal infinitive structure in Spanish and Italian, the infinitive projects a VP, but the VP is recategorized like a [-V,+N] in a nominal functional projection (I_{NP}P), just above the InfP, in the projection that we have called INP. According to the derivation by Kayne seen in (22), the NP subject of the infinitive receives genitive Case by the preposition “de/di” which is the head of a nominal functional projection GenP.

3.2. The Mixed Infinitival Structure of Italian.

In the Italian mixed construction we have to suppose that infinitive projects some verbal functional categories because it can introduce a direct object and an indirect object, it can be negated and it allows for compound, passive and periphrastic forms. Therefore, I assume that it projects a NegP, a TP and an AspP projection.

As already proposed for the nominal infinitive construction, I assume that there is a functional projection (I_{NP}P) above the verbal functional projections. The I_{NP}F projection has the role to nominalize the infinitive projection.

- (26) [_{INP} inf_i [_{InfP} PRO_j t_i [_{NegP} t_j t_i [_{TP} t_j t_i [_{AspP} t_j t_i [_{VP} t_j [_V t_i DP]]]]]]].

Up to now the infinitive phrase that I called mixed projection, would seem to be a verbal structure. However, we cannot say that it is completely verbal because it cannot assign Nominative Case to a DP (contrary to the Aux-to-Comp structure). In the mixed structure the subject is PRO, it can be controlled by an explicit or implicit argument, or it can be linked to a pronominal possessive. Moreover, the infinitive can be modified by prenominal adjectives and it can be introduced by determiners different from the definite article.

In the representation I propose for a clause like (26) the infinitive projects some verbal projections (NegP, AspP, TP, Agr_oP, VP) these are selected by a nominal functional projection (I_NP) which regategorizes the infinitive structure as a nominal clausal category.

It is possible to insert adjectives and various determiners (27) because the projections over the I_NP have a nominal status. We can suppose that the mixed structure will not have nominative subject because AgrsP is lacking or it is negatively specified for agreement. Within this approach the infinitive construction in (22) and (26-27) will differ in which and how much functional verbal categories they contain.

- (27) a. [DP II suo [Z_P Z° [XP ossessivo X° [INP non accettare i premi]]].
(His obsessive not accept-INF prizes).

3.2.1. The Subject of the Italian Mixed Infinitive

As we have seen in Section [1], when the subject is represented by a possessive pronoun, as in (21a), the null subject PRO is interpreted by a means of chain with the possessive pronoun. We still have to account for the impossibility of a prepositional subject introduced by *di*. If we assume that prepositional subjects are adjunct to the right of the VP, the ungrammaticality of (28) derives from the fact that there is no NP category to which the PP could be possibly adjoined.

- (28) *L'ossessivo [non aver mai accettato i premi di Maria].
(The obsessive not to have-INF accept the prizes of Maria).

The ungrammaticality of the prepositional subject in the Italian mixed infinitive (*di Maria* in (21b)) can also be explained under the Kayne's (1994): in (29) the infinitive raises to GenP carrying with it the entire projection. This violates the "Surface Recursion Restriction" (Edmonds, 1976) where by a recursive projection to the right cannot be moved to a Specifier. In other words, it could be said that a projection is too heavy to be moved to a Spec.

- (29) a. *Il non aver mai accettato i premi di Maria.
(The not to have-INF accept the prizes of Maria).

- b. *[t_{GenP} [t_i Inf° (NegP, AspP)]_k [l_{Gen} di [INP Maria_i [Infp]_k]]]]].

4. Summary.

Esqueme of the data:

The data	Italian nominal infinitive	Italian mixed infinitive	Italian Aux-to comp	Spanish nominal infinitive	Spanish verbal infinitive
PP-Subject	+	-	-	+	-
Postposed adjective	+	-	-	+	-
Possessive subject	+	+	-	+	-
Preposed adjective	+	+	-	+	-
Determiners	+	+	-	+	-
Compound inf-forms	-	+	+	-	+
Direct Object	-	+	+	-	+
Negation adverbs	-	+	+	-	+
inherent reflexive clitic	+	+	+	+	+
Nominative subject	-	-	+	-	+

In this paper I have argued that the nominal infinitival constructions should be analyzed as mixed extended projections: The infinitive is associated with nominal functional categories, which give a nominal periphery to a basically verbal construction. I have assumed that the infinitive projects a VP in nominal infinitives; moreover, the Italian mixed structure has some additional verbal functional projections above the VP. In both cases, the verbal projection is selected by a nominal functional head (I_N^o) which nominalizes the structure.

I have proposed that the combination of nominal and verbal properties are not in an aleatory distribution. According to Borsley & Kornfilt's idea that the nominal projections can be projected above but not below the verbal projections, I tried to derive the superficial order of the infinitive clauses, in which the nominal and verbal categories are in apparence in aleatory distribution, by adapting the Kayne's analysis for the postnominal possessive in English and French.

I have hypothesized that the infinitive structure is selected by a nominal functional projection that I call $I_N P$. In this projection the infinitive construction results to be nominalized.

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