

BASQUE SYNTAX AND UNIVERSAL GRAMMAR*

Although the term “universal grammar” has been with us for a very long time, the reality it currently conveys has emerged fairly recently. Up to then, it was a powerless dream, cherished by philosophers, but largely ignored by practical linguists. That being so, it is not altogether surprising that the contacts occasionally established between general linguists and Basque grammarians did not have much impact on the way those grammarians set about their task. This is not to imply that those contacts were fruitless. They were quite useful on other counts. No one can deny the importance for Basque linguistics of the extensive contacts between the great universalist Wilhelm von Humboldt and the erudite grammarian Pedro Pablo Astarloa, as was rightly recognized by Luis Michelena in his noteworthy article “Guillaume de Humboldt et la langue basque”. Similarly, the scholarly interaction between Hugo Schuchardt and Resurrección María de Azkue contributed substantially to the present shape of Basque studies. Nonetheless, in the more confined area of grammatical description, the influence of general linguistics remained rather limited.

Even when, thanks to Chomsky’s methodological insights, universal grammar came out of limbo about thirty years ago, it was still not very easy for practical grammarians to assess its significance for their daily toil and moil. Why not? One would think that the idea of a general linguistic theory intending to constrain all particular grammars—a conception conspicuously present throughout Chomsky’s writings then and now— would be of absorbing interest to any working grammarian. One would think so, but for one little detail. Despite all the interesting work carried out in those times by Chomsky and his disciples, the actual content of the metatheory remained so disappointingly vague and unsubstantial that for many years it was not up to doing much in the way of constraining particular grammars, except in the most trivial fashion.

Fortunately, this situation has changed dramatically over the past decade. What brought about the change was the development of the modular conception of grammar. Linguistic theory is henceforth taken to include a set of highly specific subtheories, called modules, each of them largely autonomous, i.e., characterized by its own pertinent principles, yet interacting in such a way as to provide a neatly articulate theory of universal grammar. The set of modules consists of X'-theory, θ -theory, Case

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theory, Binding theory, Bounding theory, Control theory, Government theory, and perhaps still other subtheories yet to be discovered. Each module contains a small number of discrete parameters, whose values, usually two or three, are to be adjusted so as to accommodate the structural differences between the languages of the world. It follows that there exists only a finite number of possible grammars: languages with the same setting of parameters will be grammatically isomorphic.

Starting about 1980, the research carried out in this framework by many inspired investigators using various languages has been eminently fruitful. While it is quite obvious that a lot of work remains to be done, satisfactory explanations have already been found for a host of syntactic phenomena hitherto poorly understood.

It is against this background of justifiable optimism that, taking into account the mixed character of the present audience consisting of theoretical linguists on the one hand and Basque grammarians on the other, I decided to choose as the theme of my communication the relation between Basque syntax and universal grammar.

The perspective from which we mean to approach this theme requires a little clarification. We must discard the abstract point of view that regards the two conjuncts in my title as finished theories, for in that case there would be very little to talk about. By definition, Basque syntax conforms to universal grammar and universal grammar encompasses Basque syntax, and that is all there is to it.

Since, however, such finished theories do not exist and probably never will, it is much more productive and realistic to address oneself to the theories as entities in progress—as mental constructions incessantly being shaped and reshaped—. In other words, the realities we want to bear in mind are the respective activities of the ambitious theorist aiming at a universal theory of grammar, and of the humble Basque grammarian who is just trying to find out how his language really works. These two kinds of research activities have traditionally been pursued in close to complete separation from each other. Recent years have seen some breaches opened, but, on the whole, too much isolation still persists.

The main purpose of this paper is to plead for an intensification of cooperative interaction between universal grammarians and students of Basque grammar. The arguments for this are obvious. Basque grammarians need the help of universal grammar, and, conversely, Basque grammar has a lot to offer to universal grammarians who are always in danger of being led astray by the insufficient data base furnished by their mostly Indo-European native languages.

A cogent illustration of the need Basque grammar has for the useful insights of universal grammar comes readily to mind. Although Basque grammarians had been looking at Basque verbs for centuries, yet it took a theoretician working on the universal grammar of ergativity, Beth Levin,¹ to discover that all intransitive verbs in Basque are unaccusative,² a fact with far-reaching implications for the whole realm of Basque syntax.

¹ See Levin (1983a) and (1983b).

² The term "unaccusative" is due to the British linguist Geoffrey K. Pullum and first appeared in print in Perlmutter (1978). A good explanation of this concept, which originated in Relational Grammar, is found in Rosen (1934), first published in Zaenen (1982). For its use in a Chomskyan framework, see Burzio (1981), and also Levin (1983a) and (1983b).

A privileged special case of the dialogue that I am advocating would be where the meeting between the two fields of inquiry takes place within a single mind. This, of course, is an ideal situation, arising only out of exceptional educational opportunities, never possible on a large scale. A splendid example of what can be achieved when competence in Basque and familiarity with universal grammar are found united in one person is presented by Jon Ortiz de Urbina's recent dissertation *Some Parameters in the Grammar of Basque*.

The benefits accruing to the understanding of Basque syntax from the general insights of universal grammar are amply demonstrated throughout this work. What it also shows quite clearly, however, is that the working relationship between the two scholarly interests is by no means a one-way street. The grammatical analysis of Basque is able to make quite substantial contributions to universal grammar too. As an example of this I would like to cite Ortiz de Urbina's approach to case-marking in Basque. He argues that the mechanics of case-assignment is directly related to the structure of verbal inflection, from which it follows that the particular case system of Basque is possible only thanks to the multiple agreement shown by the finite verb. If Ortiz de Urbina's view is indeed correct, which is not in the least unlikely, this discovery constitutes a significant addition to case-theory in general, and, hence, to universal grammar.

Another area where the study of Basque syntax is likely to provide an important contribution to universal grammar consists of base categories and their combinations, a topic to which I would like to devote the remainder of this paper.

In what is by far the most stimulating work on syntax I have read in the past decade, which taught me more than any other book I have seen in that period, Joseph Emonds' book *A Unified Theory of Syntactic Categories*, the author makes out an extremely general claim, a slightly more restricted version of which he credits to Edwin Williams. Emonds phrases this claim in the following way: "a defining distributional characteristic of P^{\max} is that it can appear freely as the daughter of essentially any phrase, not just in a few stipulated positions..." (page 27).

For those not familiar with this terminology, I must explain that P^{\max} is a prepositional or postpositional phrase in its most elaborate form. However, before going on from here, we must stop and pay attention to a basic ambiguity in this formulation that often remains undetected, and is all but ignored by Emonds, apparently as a matter of principle. When talking about the most elaborate form of an adpositional phrase, what exactly do we mean? Do we mean the most elaborate form such phrases take in the particular language we are investigating, or—which is by no means the same—the most elaborate form licensed by universal grammar? The wide-spread tendency to ignore this kind of distinction on the part of syntactic theory builders³ can be seen as an outcome of their all too frequent concentration

³ Emonds himself pays some hesitant lip service to this distinction, as when, on page 20, he alludes to "the possibility that some languages may be 'flatter' than others; that is, the value of 'max' might be less for some languages than for others...", but then goes on to say, "It will not be concerned with these possibilities here." On the same page he states, "I do not totally exclude the possibility that a base composition rule may be language-particular", but then limits this to the "expansions of non-phrasal nodes". See also the discussion of his Bar Notation Uniformity Principle, pages 157-159.

on familiar Indo-European languages with remarkably similar structures. No wonder then that the categories of these languages have once more begun to figure as moulds for all other languages to fit into, regardless of how Procrustean such a fit may be in actuality.

A perfect example of what I am denouncing is found in the publication we are here considering. While there is no question at all that Emonds' book is an immensely valuable treatise on grammatical theory, brimming as it is with profound insights into the common syntactic patterns of some familiar Indo-European languages, it nonetheless betrays a singular lack of appreciation of the rich diversity of linguistic structures throughout the world. A glaring instance is found on page 157 in chapter 4 where the author asserts a principle amounting to a minutely weakened version of the Universal Base Hypothesis. I quote: "Bar Notation Uniformity: The dominance relations permitted in deep structures among the categories X_i and $SP(X)$ are the same in all natural languages, and are determined by the principles of a universal categorial component".

As a partial recapitulation of the results of his work, this principle, if restricted to the languages investigated, would be both valid and interesting. Whether it holds true for all Indo-European languages is an intriguing question nothing short of extensive research can hope to answer. But surely, only a crass ignorance of other language types could have prompted the author to affirm its validity for all natural languages.

Let it be understood that I do not mean to preach any return to the kind of attitude prevalent in earlier American linguistics when all theorizing that was not directly involved with segmentation and classification of the data was anathema —this under Martin Joos' delightfully simplistic motto: "Languages differ from one another without limits and in unpredictable ways"—. Clearly, theory building is necessary. That it is the hallmark of science is a platitude, but nonetheless true.

Even if we could resign ourselves to having aims and standards for grammatical analysis different from those governing other sciences, we would still remain in need of just the kind of abstract theory that universal grammar consists of. Indeed, few of us would care to deny that we want to view human languages and their grammars not merely as "objects of wonder" whose fascinating properties we are somehow committed to describe, but rather first and foremost as manifestations of a faculty of Language shared equally by all human beings —a true mental organ able to account for a child's ready acquisition under proper conditions of any possible natural language. Thus, universal grammar is a highly worthwhile pursuit in itself, quite aside from the benefits to be gained from it for the investigation of particular grammars.

Theory building, then, is to be encouraged, not curbed. What I would like to insist on here and now is a better balanced data base. Instead of trying to build extremely detailed general theories on the sole basis of English, German, French, Italian, and Spanish, theorists should make a real effort to take full account of the grammatical characteristics of a much wider sample of languages, for example, Chinese, Japanese, Turkish, Arabic, Bantu, Kabardian, Aymara, Greenlandic, and —need I add?— Basque.

Enough of this sermonizing! Let us return to our P^{\max} and the virtual omnipresence asserted for it in the base component as designed by Emonds. This claim is embodied in the base rule schema $X_i \rightarrow X_i^k, P^{\max}$, which, in Emonds' own words, allows "PP to

occur very freely across languages, phrasal types, and bar notation levels" (page 27). Now, while this thesis constitutes a fairly essential part of Emonds' theory concerning the structure of the base component in universal grammar, and seems to hold well enough for the familiar Indo-European languages, I submit that it cannot survive a confrontation with the facts of Basque.

Note that Emonds' rule schema subsumes four different rules: $V^j \rightarrow V^k, P^{\max}$; $A^j \rightarrow A^k, P^{\max}$; $N^j \rightarrow N^k, P^{\max}$; and $P^j \rightarrow P^k, P^{\max}$. The rules involving V, A, and P seem to be valid in Basque for at least some value of j and k. A more precise statement will have to await the determination of the number of bar levels operative in Basque, as I can see no good reason to assume in advance that the number of bar levels for a particular category must be the same in all languages.

I would like to concentrate on the rule $N^j \rightarrow N^k, P^{\max}$. My contention is that this rule is not part of the grammar of Basque for any value of j or k.

Since a full investigation of Basque noun phrase structure would lead us too far afield, I will limit our discussion to maximal projections, that is, to the rule $N^{\max} \rightarrow N^{\max}, P^{\max}$, or, put into more traditional terms, $NP \rightarrow NP + PP$ – a rule familiar enough in English and many other Indo-European languages. It generates such noun phrases as:

- | | |
|------------------------------------|---------------------------------------|
| (1)a. the tables for the customers | (1)d. the road to Bilbao |
| (1)b. ties with the enemy | (1)e. the impulse towards mathematics |
| (1)c. bread from heaven | |

A straightforward transposition of these examples into Basque results in ungrammaticality. The following expressions do not make up a noun phrase in Basque, no matter what order they are put in:

- (2)a. *mahaiak bezeroentzat, *bezeroentzat mahaiak
- (2)b. *loturak etsaiarekin, *etsaiarekin loturak
- (2)c. *ogia zerutik, *zerutik ogia
- (2)d. *bidea Bilbora, *Bilbora bidea
- (2)e. *bultzada matematiketarantz, *matematiketarantz bultzada.

True enough, in the telegraphic style of chapter headings, newspaper headlines and the like, expressions of this ilk occur with great regularity. So it happens that the sixth section of the first chapter of Lardizabal's classic *Testamentu berriko kondairna edo historia* is headed *Mariaren bizitza Nazaret-en*, meaning "Mary's life in Nazareth", and the eighth section, *Jose eta Mariaren joanera Belen-era*, meaning "Joseph and Mary's journey to Bethlehem". Nonetheless, expressions of this nature are not commonly used by reliable native speakers in actual speech or normal writing.

Isn't there any way to render the English noun phrases of example (1) into idiomatic Basque? If not, Basque would be a most cumbersome language indeed. Happily, the challenge can be met easily enough.

One solution is to add a suitable verb and expand the postpositional phrase into a relative clause based on a finite verb or a past participle. Applying this solution to our examples, we obtain complex noun phrases such as:

- (3)a. bezeroentzat diren mahaiak: "the tables that are for the customers"
- (3)b. etsaiarekin diren loturak: "ties that are with the enemy"

- (3)c. ogi zerutik etorria (title of hymn): “bread come from heaven”
- (3)d. Bilbora doan bidea: “the road that goes to Bilbao”
- (3)e. matematiketarantz daraman bultzada: “the impulse that leads toward mathematics”.

This way out of the problem is, in fact, repeatedly resorted to in actual translation practices. To give an example, Prince Bonaparte’s Labourdin translator, Captain Duvoisin, translated the Latin noun phrase *charitas uniuscuiusque vestrum in invicem* from the New Testament text of 2 Thessalonians 1: 3 meaning “the love of every one of you for one another” as *batbederak elkharrentzat duzuen amodioa*, that is, “the love that you each have for one another”. The modern translators Marcel Etchehandy and Robert Puchulu, while working directly from the Greek, arrive at a similar result: *guziek elkarrengana duzuen maitasuna*, “the love that you all have for each other”, showing the same relative verb form *duzuen* “that you have”.

However, translating the noun phrases of (1) in this fashion may constitute a somewhat dubious move in the teeth of Chomsky’s well-known caveat against deriving noun phrase complements from underlying relative clauses.⁴ And indeed, there is no guarantee that a properly fitting relative clause can be found, as is evident from the unsatisfactoriness of example (3)b. Furthermore, even if a suitable candidate does present itself, it inevitably introduces some undesirable overspecification, if only because any relative clause will require a tense marker absent from the original noun phrase.

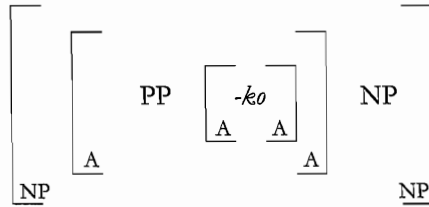
Fortunately, Basque syntax allows a more convenient automatic way to deal with the problem in hand. It is the adjectival suffix *-ko*, almost certainly borrowed from a Pre-Roman Indo-European language—quite possibly Celtic—that saves the situation. It does so by converting the whole postpositional phrase into an adjectival modifier, usually put in front of the head noun phrase. Hence, grammatical counterparts to the ungrammatical expressions under (2) are:

- (4)a. bezeroentzako mahaiak: “the tables for the customers” (from: Oñatibia, *Neketa poz*, p. 36)
- (4)b. etsaiarekiko loturak: “ties with the enemy”
- (4)c. zerutiko ogia: bread from heaven (from: *Elizen arteko biblia*, John 6: 31)
- (4)d. Bilborako bidea: “the road to Bilbao”
- (4)e. matematiketarantzko bultzada: “the impulse toward mathematics” (from: *Mitxelaren idazlan hantatuak*, p. 195).

For these examples, and all other phrases with adjectival *-ko*, I propose the structure given in:⁵

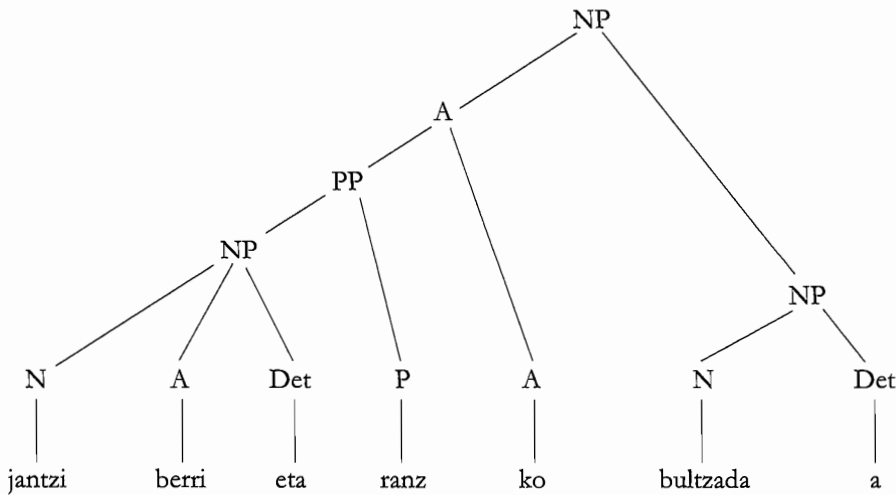
⁴ I am referring here to Chomsky’s polemic paper “Remarks on Nominalization” (Chomsky 1970), which ushered in the approach that came to be known as lexicalism, extremely controversial in the late sixties when the paper was already circulating.

⁵ My proposal is not essentially different from that of other recent grammarians such as Michelena, Wilbur and Goenaga. Structure (5) merely formalizes Goenaga’s remark: “Edozein aditzlagun, *-ko* atzizkia erantsiz gero, izenlagun bihurtzen dugu”, that is, “We turn any adverbial into an adjective by adding the suffix *-ko*” (Goenaga 1980: 95).



The structure proposed reflects my position that *-ko* is a derivational suffix with the subcategorization features + A and + PP-.⁶

For the sake of clarity we will present an approximate tree diagram for the noun phrase: *jantz_i berrietaranz_{ko} bultzada* "the impulse toward new clothes".



The prenominal position of the *-ko* phrase accords with a general tendency Basque has towards the order where the modifier precedes the head, a characteristic of SOV languages. This order is exemplified by genitival constructions: *bezeroen mahaia* "the table of the customers", as well as by participial and finite relatives: *atz_o ikusi mahaia* "the table seen yesterday", *han ikusi dugun mahaia* "the table we saw there". Yet, plain ordinary adjectives run counter to this pattern, and follow instead the head noun (except for *gaixo* "pitiful").

⁶ Examples such as *arta-puska baino gozoagoko gizona* "a man sweeter than a piece of corn", or *izarra baino ederragoko andrea* "a lady more beautiful than a star" (Euskaltzaindia 1985: 243) may seem to indicate that *-ko* can also follow an AP. Since only comparative AP's appear to allow *-ko*, an alternative to be explored is to claim that *-ko* is, in fact, licensed by the postposition *baino* "than". That is, the latter example cited above would be derived from something like **ederrago izarra bainoko andrea* by one or more obligatory rules. Examples without any comparative, such as *indar handiko* "of great strength", *harrigarriko* "astonishing", have an underlying sociative or instrumental postposition, as will be explained later.

The fact that *-ko* phrases do not follow their governing noun phrase is no ground, however, for refusing them adjectival status. Undeniable adjectives, such as those marked with the derivational suffixes *-dun* or *-tar*, can also precede their head noun: *bizardun jendea* “bearded people”, *menditar jendea* “mountain people”. Postnominal order is also possible here: *jende bizarduna*, *jende menditarra*, but so also for *-ko* phrases: *ogi zerutikoa* “bread from heaven”, *Amasei seme Euskalerriko* “sixteen sons from the Basque country” (title of a book by Yon Etxaide). For an older textual example of this postnominal order, see the phrase *gende vicitze gaichtotaco guciac* “all people in an evil way of life” from Leizarraga’s version of Luke 15: 1, published in 1571. There the *-ko* phrase *vicitze gaichtotaco* is put into the normal adjective position between the noun *gende* “people” and the quantifier *guciac* “all”. Examples of this kind are still quite common in 19-th century Guipuzcoan texts, e.g., in Iztueta’s *Guipuzcoaco provinciaren condaira*. One example out of many: *Itzguera utsunerik bagueco onec...* “this language without flaws...” (p. i.)

We have assigned to the suffix *-ko* the subcategorization feature + PP $\bar{}$. This decision may appear questionable in the light of the examples under (6), where *-ko* seems to be preceded not by a postposition but by a noun:

- (6)a. *etxe*ko alaba: the daughter of the house
- (6)b. *buru*ko mina: a headache
- (6)c. *Bilboko* eguraldia: Bilbao’s weather
- (6)d. *Bayonako* hiria: the city of Bayonne.

Appearances, however, are deceptive. It has been shown that in all these examples there is an underlying locative postposition, absent from the surface.⁷ Accordingly, more literal translations are:

- etxe*ko alaba: a daughter in (or: *from*) the house
- buru*ko mina: a pain in the head
- Bilboko* eguraldia: the weather in Bilbao
- Bayonako* hiria: the city at Bayonne.

Helped by his native dialect which has preserved some occurrences of the inessive postposition before *-ko*, such as the *n* in *etxenko alaba*, the famous Souletin lexicographer Pierre Lhande was well aware of the underlying postposition, as can be seen from the structure of the entry *-ko* in his *Dictionnaire basque-français*, p. 614-615 (1926). The insight was shared by the Labourdin grammarian Pierre Lafitte, but remained totally neglected until it was revived and discussed in detail by the great *praeceptor Vasconiae* Luis Michelena in the early seventies. First touched upon in 1970 during the fourth lecture of a linguistic summer course taught by him on these very premises and published in Basque translation as Michelena (1972a), the concept of the deleted locative played an essential role in his paper “Egunak eta egun-izenak” (Michelena 1971). The diachronic perspective introduced here was further developed in Michelena (1972b), reprinted as part of Michelena (1985).

⁷ While I concur with Wilbur’s claim that the deletion of the inessive ending in this context originated as “a fluke of historical phonology” (Wilbur 1979: 94), it is clear that the process has by now evolved into a morphological one.

In all present-day varieties of Basque except Souletin, deletion of the inessive ending *-an* or *-n* in front of *-ko* is strictly obligatory. Optionally deletable are the dynamic counterparts of the inessive, i.e., the ablative ending *-tik* "from", and the adlative ending *-ra* "to". Interestingly, already in Pierre d'Urte's seventeenth century *Grammaire cantabrique* (published only in 1900), we read: "du ciel: *cerucoa* ou *ceruticacoa*". With two important exceptions to be treated later, other postpositional endings are not deletable.

Neither Lhande, who believed that *-ko* could be added to adjectives also (Lhande 1926: 615), nor Michelena, who expressed reservations about the derivation of those *-ko* phrases that correspond in meaning to the Genitivus Qualitatis in Latin (Michelena 1972b: 314), —for that matter, no one that I know of— has ever claimed postposition deletion to be responsible for all seemingly postpositionless *-ko* phrases existing in the language. This, however, is just the claim I want to make and defend in this paper. Disregarding the synchronically unrelated use of *-ko* as a diminutive, and, occasionally, augmentative suffix, I maintain that +PP — is the only subcategorization feature for *-ko* aside from +A.

Taking this subcategorization feature seriously has implications for the categorial status of other elements in Basque grammar. Not only must the stative⁸ suffix *-(r)ik* of such expressions as *alferrik* "in vain", *etorririk* "having come", *eginik* "(having) done" be granted postposition status, but the same conclusion must be drawn for the synonymous suffix *-ta*, as found in *nabita* "willing", *etorrita* "having come", *eginda* "(having) done", the historical origin of which is undoubtedly the conjunction *eta* meaning "and".

Moreover, at this point Basque provides evidence in favor of Emonds' controversial claim that S' is actually a PP. This is because S' is also allowed to precede *-ko*. The question *Hau zer da?* "What is this?" (where the topic *hau* "this" precedes the question word *zer* "what") is an S' (for this see Emonds 1985: 319), and precedes *-ko* in *hau zer dako bazkari bat*, literally: "a lunch of what is this", i.e., a lunch so splendid that it causes people to exclaim "What is this!". The example is taken from Jean Barbier's story "Hachko eta haren bi lagunak" in *Légendes du Pays Basque* (2n ed., p. 131). I can add that it is not an isolated idiom, but representative of a productive pattern. Noun phrase complement clauses of the usual type also make the same point, as the presence of the complementizer *-la* clearly shows that the constituent preceding *-ko* is indeed an S':⁹ *eguin zituztelako urrikimenturic gabe*, "without any remorse that they committed them" (Mendiburu, *Jesusen amore-nekeei dagozten zenbait otortz-gai*, II, p. 488), *bizi garelako seinale*, "a sign that we are alive" (*Mitxelena-ren idazlan hauetatuek*, p. 66). Basque has a language particular transformation that adds an extra postposition *-ko* on top of any PP modifying an NP, after which the original

⁸ For the distinction between partitive *-(r)ik* and stative *-(r)ik*, see de Rijk (1972).

⁹ The strength of the Basque grammatical tradition, concentrated almost entirely on morphology, can be assessed from the ambiguous attitude towards *-ko* that we notice in a recent Basque grammar, the collective work of a dozen experienced grammarians, published under the auspices of the Basque Academy. After correctly pointing out that the *nongo* "case" (i.e., the *-ko* phrase) is nothing but the adjectival form of the *non* case (i.e., the inessive), the authors nevertheless proceed to include it under the locative cases, calling it "leku-genitiboa", and explicitly claim psychological reality for this inclusion (Euskaltzaindia 1985: 347). Note finally that the term *nongo* case obscures the issue as other cases than the inessive are often deleted in front of *-ko*.

postposition will sometimes undergo deletion. Leaving aside the consideration that structure-building transformations of this type are not countenanced by universal grammar as currently understood, there remains the unsolvable mystery as to why such a postposition should be added at all.

The traditional position is solely based on the morphological behaviour of *-ko*: it can follow the indefinite marker *-ta*, and it can take *-eta* (a combination of *-ta* with the plural allomorph *-e*) used instead of the plural definite article —two properties peculiar to locative postpositions. It is quite clear, however, that this behaviour is not to be ascribed to the element *-ko*, but rather to the deleted underlying inessive postposition *-(a)n*: *hirietako* “from the cities”, because of: *hirietan* “in the cities”. Note that the plural *-ko* phrase of example (4)a does not show the plural allomorph *-eta*, but (4)e does, as it is brought on by the locative postposition *-rantz* “towards”, since the word for mathematics is plural in Basque.

The syntactic behaviour of *-ko* phrases clearly indicates their adjectival status. Like other adjectives they can be used independently, that is, with a zero pronoun as head, and then take the full determiner system: *hirikoa* “the one from the city”, *hiriko bat* “one from the city”, *hiriko hori* “that one from the city”, and so on, exactly similar to *handia* “the big one”, *handi bat* “a big one”, *handi hori* “that big one”, and so on.

It will now be obvious that *-ko* is not an inflectional morpheme at all, but rather a derivational one,¹⁰ in that it constitutes the head of an adjectival phrase.¹¹ As we have seen, its “Sitz im Leben” is simply this: Postpositional phrases are prohibited from modifying NP’s by the base structure rules of Basque, and thus I presume that the suffix *-ko* was hailed into the language to enable it to get around this prohibition.

By precisely what mechanism *-ko* phrases are synchronically generated by the grammar is unessential for my purpose. Goenaga as well as Wilbur propose to generate them by transformational reduction of various types of relative clauses. To cite Goenaga’s examples:

mendian dagoen gizona (“the man who is on the mountain”) ⇒ *mendiko gizona* (“the man on the mountain”)

Bilbora doan trena (“the train that is going to Bilbao”) ⇒ *Bilborako trena* (“the train to Bilbao”)

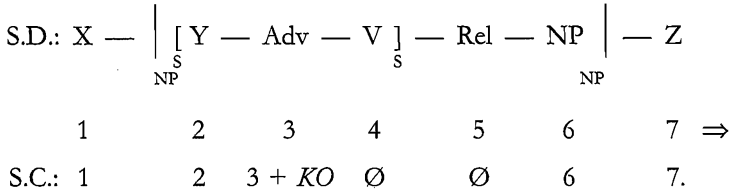
zurekin ditudan harremanak (“the relations I have with you”) ⇒ *zurekiko harremanak* (“the relations with you”).

¹⁰ This insight was already formulated by Lafon, who, not realizing the full import of his own statement, attempted to reconcile it with the traditional conception: “Le suffixe *-ko* est donc bien un suffixe de dérivation, qui a été intégré à la déclinaison et affecté au singulier, par conséquent au défini, et qui a reçu un correspondant à l’indéfini, *-ta-ko*, et un au pluriel, *-eta-ko*” (Lafon 1965: 142). Wilbur comes closer to the truth when he remarks, “It is all too evident that *ko* is not an inflexion in the traditional sense. It is a noun phrase complementizer and, what is more, a noun phrase dominated by the *locative* node” (Wilbur 1979: 94). Regrettably, whatever insight is concealed under the designation “noun phrase complementizer” is fated to remain there, since no concept corresponding to that term exists as yet within universal grammar.

¹¹ If the inherent case endings of postpositional phrases are considered inflectional suffixes —and what else could they be?—, *-ko* phrases constitute an irregular case with respect to Emonds’ generalization: “Inflectional suffixes follow derivational suffixes in all regular cases” (Emonds 1985: 201).

These examples are found in Goenaga (1980: 134, and repeated in part on p. 291).

In the summary of rules at the end of the book, Goenaga formulates a transformation T_{ko} (p. 388), which simultaneously deletes the relativized verb form and inserts a segment *-ko*, adjoining it to a constituent described as adverbial:



It must be clear that T_{ko} , as formulated here by Goenaga, is much too general. Surely, not just any V can be deleted in this process. Furthermore, T_{ko} , is theoretically objectionable for doing too many things at once. Any attempt to refine the formulation of T_{ko} would run into great difficulties, and would, in my opinion, be misguided, because, as hinted at earlier, I reject for semantic reasons the existence of any transformational relationship whatsoever between *-ko* phrases and relative clauses. In particular, it seems obvious that the suffix *-ko*, being derivational in character, must be present in deep structure and be described in the morphological component of the grammar.

Yet even if, against my expectations, a transformational source could be established, my main claim about the functioning of *-ko* would not be invalidated at all, as long as the adverbial to which it is joined is defined precisely as what it is: a postpositional phrase. To be sure, the postposition in question is not always morphologically realized. This, however, is hardly a problem. That locational adverbs, such as *non* “where”, *hemen* “here”, *hor* “there”, *han* “yonder”, whether morphologically so marked or not, are indeed inessives, can be taken for granted. It is hardly controversial, either, to assume that time adverbs such as *gaur* “today”, *bihar* “tomorrow”, *etzi* “the day after tomorrow” are underlyingly inessives. The inessive ending shows up in other time phrases, such as *une honetan* “this moment”, *aste hartan* “that week”, and also in compound forms, such as *gaur-biharretan* “today and/or tomorrow”, *bihar-etzietan* “tomorrow and/or the day after tomorrow”. For many other time adverbs, the inessive is optional: *antzina* or *antzinan* “in former times”, *luzaro* or *luzaroan* “a long time”, *sekula* or *sekulan* “never”, *ardura* or *arduratan* “often”, and its synonyms, *usu* or *usutan*, *sarri* or *sarritan*. For *noiz* “when”, compare the expression *noizean behin*. (Historically, the *-z* of *noiz* is, of course, the instrumental case ending, still used with time adverbials in the Northern dialects: *egun batez* “one day”). Modal adverbs, such as *nola* “how”, *hala* “so”, etc., are also underlyingly postpositional. The dispute as to whether the modal suffix *-la* is still to be analysed as the adlative postposition it once undoubtedly was, need not be settled here. If it cannot be so analysed, we must postulate a deleted or zero postposition. Notice that various dialects tend to realize this postposition, either as the instrumental *-z*: *nolaz*, *halaz*, or as the inessive *-tan*: *nolatan*, *halatan*. The morpheme *-ko*, however, cannot be joined to adverbial constituents ending in a derivational suffix not analysable as a postposition, such as the suffix *-kei(ro)* of *ederkei* “fine”, or, for some speakers at least,

the suffix *-ka* of *apurka* "by bits and pieces". We should, of course, expect the distinction between postpositional morphemes and derivational affixes to be liable to change in time, and thus, subject to dialectal, and even idiolectal, variation.

A longstanding crux for a transformational derivation of *-ko* phrases has been examples where they indicate inalienable possession. Instances of this type are *bibotz oneko (emakumea)* "(the) kindhearted (woman)", *hamar urteko (ardoa)* "ten year old (wine)", or the *-ko* phrases in this gem of ancient Basque wisdom: *Hamortz eguneko ogiari hirur asteko gosea* "For fifteen day old bread, a three week old hunger". This type too Goenaga derives from relative clauses, but without the adverbial phrase required by the previous type of examples. What he does, is use the verb **edun* "to have" with its corresponding absolutive object, i.e., he derives *bibotz oneko emakumea* "the kindhearted woman" from *bibotz ona duen emakumea* "the woman who has a kind heart", whether by a suitably generalized T_{ko} or by some new transformation is never made explicit.

In a paper read september 27, 1984 in Pamplona, Robert Trask took Goenaga's suggestion a step further, and proposed a rather drastic solution, doing away with the problem entirely. What Trask did was dissociate totally the latter type of *-ko* phrase from the one dealt with earlier, claiming the existence of a second suffix *-ko*, also adjectival in nature, which is joined, not to adverbials, but to N' (see Trask 1985).

The first thing to be said about this proposal is that it doesn't work. The free occurrence of numerals and quantifiers shows that *-ko* must be added to a projection higher than N' , cf. examples such as *biru asteko gosea* "a three week old hunger", *urte askoko bizia* "a life of many years", *bera baino lau urte gutxiagoko anaia* "a brother four years younger than himself", etc. What actually precedes *-ko* in this type of example is a subset of N^{\max} from which definite noun phrases appear to be excluded —a subset not coinciding with any intermediate projection of N .

As to the remaining aspect of Trask's analysis, the thesis that there are two distinct suffixes *-ko*, both of them adjectival, seems to me highly counterintuitive. True, intuitions about grammatical structure are far from infallible —as indeed any practising grammarian knows only too well. Nevertheless, the following maxim expresses well the attitude of most modern linguists: Any analysis that brings divergence instead of expected unity should be regarded with suspicion, and only be adopted as a last resort, when everything else has failed. The question to ask is then: Does everything else fail? Is there no alternative analysis that upholds the unity of the morpheme *-ko* by showing that this type of *-ko* phrases can be derived also from underlying postpositional phrases? I claim there is. Just consider the following sentences:

- (7)a. Andre hori oso bihotz onarekin jaio zen, baina biziak garraztu egin du.
"That lady was born with a very kind heart, but life has embittered her".
- (7)b. Leandro hogeitabost urterekin ezkondu zen. (A. Zavala: *Errenteriako bertsolari zaharrak*, p. 49).
"Leandro got married at (lit. *with*) twenty-five years".
- (7)c. Gure lagunartea oso txikia da zazpi lagunekin.
«Our club is very small with seven members».
- (7)d. Jaunak harrabots ikaragarri batekin ihurtzuria karraskarazi zuen... (Duvoisin, *I Sam.* 7: 10). The Lord made the thunder crack with a frightening noise...?

According to the theory presented earlier, we expect to be able to turn the postpositional phrases ending in *-(r)ekin* "with" occurring in these examples into adjectival modifiers ending in *-(r)ekiko*. This, however, does not appear to be possible:

- (8)a. *oso bihotz onarekiko emakumea: a woman with a very kind heart
- (8)b. *hogeitabost urterekiko gizona: a man at twenty-five
- (8)c. *zazpi lagunekiko taldea: a group with seven members
- (8)d. *harrabots ikaragarri batekiko autoa: a car with a frightening noise.

There are, however, noun phrases of a slightly different form that have just the meaning we expected (8) to carry:

- (9)a. oso bihotz oneko emakumea: a very kindhearted woman
- (9)b. hogeitabost urteko gizona: a man of twenty-five
- (9)c. zazpi laguneko taldea: a group of seven members
- (9)d. harrabots ikaragarri bateko autoa: a car with a frightening noise.

What can we make of all this? Well, we already know that certain postpositions are deleted in front of *-ko*: the inessive *-(a)n* obligatorily, and the ablative *-tik* as well as the adlative *-ra* optionally. All we have to do now is assume that the sociative postposition can also be deleted in the same context, subject to a semantic condition as to the nature of the relationship between the lexical head of the postpositional phrase and the head of the following NP. Whenever this relationship is inalienable, or otherwise very close, the sociative ending will be deleted, as in examples (9). But if the relationship is purely external, the sociative ending is usually retained: *Madrilekiko loturak* "ties with Madrid", *apaizekiko jarrera* "the attitude towards priests", *gure gauzekiko iritzjak* (*Mitxelaren idazlan hautatuak*, p. 292) "our opinions with regard to the things". The relationship between articles of clothing and their wearer constitutes a borderline case, where the deletion is optional:

- (10)a. jantzi gorriarekiko gaztea: the young person with the red suit
- (10)b. jantzi gorriko gaztea: the young person with the red suit.

(Examples (10)a,b are taken from Euskaltzaindia (1987), a recently published appendix to Euskaltzaindia (1985), which came to my attention after the bulk of this section had already been written).

For some speakers retention of the postposition is possible even for some of the inalienable instances. As emotions cannot exist apart from the person who has them, one would expect (11)a to be ungrammatical. Indeed, (11)b is much more common than (11)a, which, nevertheless, is also attested in the works of Orixe, if I am not mistaken.

- (11)a. bihotzaldi handiekiko olerkaria: a poet with great emotions
- (11)b. bihotzaldi handiko olerkaria: a poet with great emotions.

Examples such as (10) and (11) where deletion is optional for at least some speakers, lend strong support to the analysis proposed here.

A few questions still remain. We may ask what happens to the article in these derivations. Why *bibotz oneko* from *bibotz onarekiko*? The answer is that the article and

the postposition have undergone amalgamation prior to deletion of the latter. Evidence for such amalgamation can be found in conjoined noun phrases:

- (12)a. Emaztearekin eta ohaidearekin etorri zen.
 “He came with his wife and his concubine”.
 (12)b. Emazte eta ohaidearekin etorri zen.
 “He came with his wife and his concubine”.
 (12)c. *Emaztea eta ohaidearekin etorri zen.

Once the postposition on *emazte* has been deleted under identity with the one on *ohaide*, the article *-a* has to go too, as shown by the ungrammaticality of (12)c.¹²

We may ask also why demonstratives appear to be ruled out from this construction. An answer may be attempted along the following lines. Notice that in the properly inalienable type, as exemplified by *bihotz oneko emakumea* “a kindhearted woman” and *hamar urteko ardoa* “ten year old wine”, demonstratives are excluded on semantic or pragmatic grounds. In practice then, among the PP constructions subject to *-(r)ekin* deletion, only very few semantic types allow demonstratives at all, the main example being the one involving articles of clothing and the like, where the deletion rule is at most optional anyway:

- (13) Txapel gorri horiekiko mutilak karlistak dire.
 “The boys with those red berets are Carlists”.

Since the occasion to use truncated demonstrative *-ko* forms presents itself so rarely, the supporting surface morphology was never developed: **honeko*, **horreko*, **hareko*, **haueko*, **horieko*, **baieko* do not exist.

The grammar of Basque, then, must express this restriction by means of an output filter on just these forms, or, equivalently, by blocking the *-(r)ekin* deletion rule just in case the NP governed by this postposition ends in a demonstrative element.

We must now ask whether the sociative postposition is the only non-locative one that can be deleted in front of *-ko*. It turns out that also the instrumental postposition can be deleted in this context —again under certain conditions. In the northern dialects the instrumental phrase *indar handiz* “wish great strength” is utilized instead of *indar handirekin*, yet, here too, the adjectival phrase *indar handiko* “of great strength” is in common use. Also with regard to those same dialects, Lhande asserts that *-ko* can be added to adjectives when one wants to place them before the noun (Lhande 1926: 615). This, however, is utterly incorrect. Nobody would ever say **handiko katu* instead of *katu handia* “the big cat”, nor **urdingo begiak* instead of *begi urdinak* “blue eyes”. The two examples he cites are both instances of instrumental postposition deletion. The first one is *gizon gaitza* or *gaitzeko gizona* “the terrible man”. The form *gaitzeko* here is derived via *gaitzezko* from the noun *gaitz*

¹² It may seem that in the now extinct Roncalese dialect, sentences like (11)c were grammatical, witness this example: *eta bere elia edo itzarekin egotxian ztion espiritu gaxtuak* (Hualde Mayo, Matt, 8:16), where *elia* is the definite form of *ele* “word”. This, however, is not a genuine counterexample. The conjunction *edo* “or”, as used here, introduces a metalinguistic phrase. The sentence should be read: *eta bere elia* (or, we can also say: *itzza*) *-rekin egotxian ztion espiritu gaxtuak*.

“evil”, not from the adjective *gaitz* “hard”, “difficult”. As to his other example, *gizon harrigarria* or *harrigarriko gizona* “the astounding man”, it is well known that all derivatives with the suffix *-garri* are nouns as well as adjectives. The form *harrigarriko* derives from the noun *harrigarri* “something causing astonishment” via the instrumental *harrigarri_z*. The form *harrigarri_zko* with undeleted instrumental is also frequently used.

It is clearly not feasible, nor necessary at this point, to continue and provide an exhaustive catalogue of all types of *-ko* phrases together with their derivations. We have set up a deletion rule, for which there is a lot of evidence, applying to the inessive, ablative, adlative, sociative, and instrumental postpositions —a rule usually optional, but sometimes obligatory. A certain amount of research is still needed to elucidate various details (e.g., the extent and validity of *bakoitz* deletion as proposed in Euskaltzaindia 1987: Part 2, p. 11-12), but on the whole, I get a strong impression that the machinery developed here suffices —or very nearly so— to derive all *-ko* phrases, including the Basque equivalents of the Latin *Genitivus Qualitatis*, which seem to have puzzled Michelena (Michelena 1972b: p. 314); also (1985: 305). Thus, our uniform analysis appears to work rather nicely. In opposition to Trask’s inherently implausible¹³ and factually incorrect proposal requiring the existence of a second morpheme *-ko*, with the same meaning as its homonym joined to PP, but to be combined instead with an NP provided the latter has the internal structure of an N’, we maintain, on the contrary, that there exists only one adjectivizer of the form *-ko*, always combining with a PP in deep structure.

To prevent misunderstanding, one more remark must be added. In section 4 of his article, Trask states that his second *-ko* is not fully productive. I am not quite sure that this is correct, for it is at least conceivable that the restrictions observed, to the extent that they are more than idiolectal, can be explained on systematic semantic grounds. But even if Trask’s statement should turn out to be right, that situation would not favor his approach over mine in any way. In my analysis, *-ko* is not transformationally introduced either. It is present in deep structure; and deep structure combinations can be either productive or lexically restricted (Emonds, p. 196).

It will have been noticed that we have considered Basque case endings as postpositions, even calling them by that name. They are in fact the translational equivalents of the most frequent English or Spanish prepositions. Yet, they differ from such prepositions in one important respect, aside from linear order. Whereas a preposition has a certain degree of syntactic independence, a Basque case ending will stand or fall with the physical presence of its corresponding noun phrase. In English or Spanish conjoined prepositions are possible, but conjoining is impossible for Basque case endings.

An attractive way to account for this difference is to assume along with Emonds (p. 224) that an inherent (i.e., adverbial) case ending is not a postposition but a mere desinence, the result of a late morphological rule spelling out a syntactic feature complex associated with a postulated lexically empty P governing the NP involved.

¹³ One indeed wonders whether a subcategorization feature of the form N’— is needed in the grammar of any language.

Such a rule cannot operate on an NP, unless the latter is physically present (in Basque, like in Japanese, case is realized on N^{\max} , not on SP(N) or N.) Moreover, the fact that the desinence comes about by means of a late spelling-out rule following all syntactic rules that affect NP's, guarantees the persistence of the marked NP all the way up to the phonological level. Since nothing even faintly resembling a preposition is found in Basque, the postulated lexically empty P must be taken to be a postposition. Thus, there is a one-to-one —or perhaps many-to-one— correspondence between the set of lexically empty postpositions (distinguished by their syntactic feature content) and the totality of case endings in Basque. In particular, an inherent case ending on the surface points to the presence of an empty postposition in deep structure, unless, of course, it is due to a following lexical postposition.

Now, it only remains to check and see if, with regard to the matter in hand, lexically realized postpositions behave the same way as empty postpositions. It appears they do indeed. Consider the lexical postpositions *alde* "in favour of", and *kontra* "against". Their projections occur as complements to NP only when followed by *-keo*, not otherwise.

- (14)a. *erregeren aldeko gudariak*: the soldiers in favour of the king
- (14)b. *zakurren kontrako lagunartea*: the society against dogs
- (14)c. *kanpandorreari kontrako saguzarrak*: the bats against the belfry.

Without *-keo*, one has at the most truncated sentences, not noun phrases:

- (15)a. **gudariak erregeren alde*
- (15)b. **lagunartea zakurren kontra*
- (15)c. **saguzarrak kanpandorreari kontra*.

Lexical postpositions are never deleted in front of *-keo*. This prompts the question as to whether the postposition deletion rule we have been working with is actually necessary. Could one not assume instead that the element *-keo* sometimes can or must fill an empty P, after which the spelling-out rule simply blocks? The idea sounds attractive, but the fact that *-keo* is an A, not a P, makes it somewhat implausible.

At any rate, we see that, at least for the purposes of our discussion, we were justified in treating inherent case endings as postpositions. Are perhaps all case-marked NP's in Basque to be analysed as PP's? What about the grammatical cases, that is to say, those that are assigned by V or SP(V), and which, in Basque, happen to coincide with the ones involved in the agreement system of the finite verb? According to this definition, there are three grammatical cases in Basque: the absolutive, the ergative, and the dative. Clearly, analysing an absolutive NP as a morphologically unmarked PP would be tantamount to giving up the distinction between PP and NP altogether,¹⁴ and must be rejected for that reason. But what about the other two, the ergative and the dative? Their status is somewhat unclear. Here we will make use of an old technique in generative grammar; we will let the grammar itself resolve the unclear cases (cf. Chomsky 1957: 14). The grammatical cases

¹⁴ This, however, is precisely what Wilbur does in his Fillmorean Case Grammar approach to Basque syntax (Wilbur 1979).

never occur in front of *-ko*, as Azkue already noticed (Azkue 1933: I, 344), nor are they ever replaced by *-ko*. Given the theory of this paper, a straightforward conclusion is that the grammatical cases are not PP's but NP's.¹⁵ Consequently, the dative or ergative case endings are not associated with postpositions, empty or not. Another way to express this is to say that the ergative and dative in Basque are not oblique cases.

Since in the absence of a governing verb or postposition, no NP can acquire case, the case filter prevents ergative, dative, or even absolutive, noun phrases from modifying another NP, unless the latter is a nominalization inheriting the case marking power of the verb it is based on. Thus, the equivalents of the English constructions *the letter by mother* and *the letter from mother* are ungrammatical in Basque: **amak eskutitza*, **amari eskutitza*. Both these concepts must be expressed in Basque by the genitive construction: *amaren eskutitza* "mother's letter".

This brings us to the genitive case, which forms the last hurdle in our analysis. If the genitive marker *-r(en)* of *amaren* "mother's" were a postposition, any genitive construction would constitute a counterexample to our claim that, in Basque, postpositional phrases cannot modify noun phrases directly. Fortunately, granted the conclusion above that not all case endings represent postpositions, there is no a priori reason to assume the genitive case marker to be a postposition. At first sight, it is no more to be so analysed than is the English possessive marker *-s*, which is treated by Emonds not as a postposition but as a case ending to be inflicted on any NP dominated by SP(N). Yet, this may not be the right analysis for Basque, either. It turns out that there are important structural differences between the English possessive and the Basque genitive. English possessives do not allow demonstratives: **those Peter's books* has to be rephrased as *those books of Peter's*, whereas Basque genitives admit the full determiner system: *andre bonen liburur horiek* "those books of this lady". I assume therefore that Basque genitives are not dominated by SP(N).

Comparing now genitives with *-ko* phrases, we find that they are entirely parallel in distribution. First of all, while normally preceding the noun phrase they modify, both of them can also occupy the regular adjective position behind the following noun: *Peru gurea* (title of folksong) "our Pete", *Jaun zerukoa* "the Lord in heaven". Furthermore, genitives, too, can be used independently, and then take the full determiner system: *andrea* "the one belonging to the lady", *andrea bat* "one belonging to the lady", *andrea hori* "that one belonging to the lady", etc. Notice, incidentally, that these forms provide evidence against considering the genitive marker —or, for that matter, the suffix *-ko*— a postposition, as no article or demonstrative is ever added to a postposition in Basque.

Given the obviously adjectival character of most genitive phrases, I would like to suggest for them structure (16)a, quite parallel to the one I proposed earlier for *-ko* phrases ((16)b):

$$(16)a: \quad \left[\begin{array}{c} \text{NP} \\ \text{A} \quad \text{A} \quad \text{A} \end{array} \begin{array}{c} [-ren] \\ \text{A} \end{array} \right] \quad (16)b: \quad \left[\begin{array}{c} \text{PP} \\ \text{A} \quad \text{A} \quad \text{A} \end{array} \begin{array}{c} [-ko] \\ \text{A} \end{array} \right]$$

¹⁵ A similar claim for dative noun phrases in Spanish is made by J. Strozer in her UCLA dissertation *Clitics in Spanish* (Strozer 1976). Obviously, the objection voiced by Emonds (p. 62, note 34) does not apply to the Basque case.

If (16)a is correct, the genitive marker *-(r)en*, like *-ko*, constitutes a derivational suffix, not an inflectional ending. This idea, of course, is hardly new. It must be what Michelena had in mind when he wrote: "... un indice de génitif du type basque ou kartvélien, ou, ce qui revient au même, un suffixe de dérivation, formant une nouvelle base nominale qui peut à son tour recevoir d'autres suffixes casuels, plutôt qu'un suffixe flexionnel." (Michelena 1985: 351).

We discover strong support for the analysis of (16)a, when we compare the status of the Basque genitive with that of its counterpart in Indo-European languages such as Latin, Russian, and German. Unlike what happens in those languages, a Basque genitive is never assigned a θ -role by the verb: no Basque verb is subcategorized for genitive noun phrases. Accordingly, the genitive case in Basque is never assigned by V or SP(V), although in the northern dialects it optionally replaces the absolutive case of direct objects in certain nonfinite clauses (see Heath 1972). As a matter of fact, it would be unreasonable to call the morpheme *-(r)en* a case marker at all, but for a historical accident. Since many lexical P's are historically derived from nouns, the genitive figures prominently among the cases assigned to NP's by lexical P's: absolutive, dative, instrumental, ablative, inessive, and, quite often, genitive, as for instance in our examples (14)a and (14)b.¹⁶ Thus, the morpheme *-(r)en* seems to be both a derivational suffix and a case marker.

Ironically, the quandary we are in appears to justify a Traskian analysis, although not one Trask himself proposed. I am tempted to claim that there are two distinct morphemes *-(r)en* in Basque, historically, but not synchronically, related. One is the derivational suffix of (16)a, the other a case marker induced by certain lexical P's.

However this may be, the genitive construction as such, which is the only one we have to deal with, contains only the derivational suffix *-(r)en*, and, hence, constitutes no counterexample to our general claim about postpositional phrases.

We have finally reached home base. We have established our main result: PP's in Basque do not modify NP's. We have also specified in great detail what Basque does about it, primarily to show that the restriction in question does not overly impoverish the expressive power of the language.

The limited PP distribution demonstrated here for Basque is in no way exceptional. It is found in many languages across the world. From the scanty information at my disposal, I have been able to ascertain that Quechua,¹⁷ Japanese,¹⁸ Turkish,¹⁹ and older Hungarian²⁰ are similar to Basque in this respect (modern Hungarian, like Finnish, has lost the restriction under the influence of the neighbouring Indo-European languages, chiefly German).

As to the strategies these languages use to make up for this restriction, we have seen them all exemplified in Basque already. Quechua has nothing but participial

¹⁶ A case can be made for also including the partitive, occurring with *gabe* "without", as well as the adlative, occurring in the somewhat dialectal *oibanera buruz* "facing the woods", "in the direction of the woods".

¹⁷ P. C. Muysken: University of Amsterdam, personal communication.

¹⁸ Noriko Shiratsuki: Kyoto, personal communication.

¹⁹ A. H. Nauta: University of Leiden, personal communication.

²⁰ L. K. Marác: University of Groningen, personal communication.

relatives to help it out. Japanese makes use of possessive *no*, a very general particle combining the functions of Basque *-ko* with those of the Basque genitive. Turkish and older Hungarian mainly use participial relatives, but can also utilize a morpheme similar in function to Basque *-ko*, but more restricted in distribution. In Turkish the relativizer *ki* can be joined as a suffix to a genitive or locative noun phrase: *evdeki* "of the house" is comparable to Souletin *etxenko*, and *düñkü* "yesterday's" corresponds to *atzoko* in Basque. Hungarian has available a derivational suffix *-i*, as used in: *égi kenyér* "bread from heaven" (Basque: *zeruko ogia*), *Pariszi* "Parisian" (Basque: *Pariseko*), *tegnapi* "yesterday's" (Basque: *atzoko*).

We have shown that the unrestricted distribution of PP is but one of the options open to universal grammar. To account for those options, a parameter will be needed somewhere. To find out where exactly in the general theory this parameter is located will still require a great deal of research. As one of the paths to be explored, the following suggestion may be promising. Let us rephrase Emonds' claim, using P" instead of P^{max}, and take as the relevant parameter the independently needed one that specifies the number of projections of P. Then we have for the English type of language P^{max} = P", and for the Basque type, P^{max} = P'. In point of fact, there are deeply rooted differences between English PP's and Basque PP's, which can be explained on the basis of the assumption that Basque lacks SP(P), and, hence, that P' = P^{max} in Basque. English SP(P) is made up of measure phrases and adverbs such as *right*, *straight*, *clear*, etc. No such adverbs can modify PP's in Basque. The same effect is obtained by reduplicating the NP in construction with P: *eguerdi-eguerditan* "right at noon", *etxe-etxeraino* "right up to the house". As for measure phrases, those are themselves PP's in Basque, and are not contained within other PP's, but are dominated directly by S:

- (17) Elizatik itsasoa bostehun metrora dago.
 "The ocean (itsasoa) lies five hundred meter from the church (elizatik)."

Of course, the suggestion offered here will have to be checked for many languages besides Basque before it can be adopted with confidence.

The conclusion of this paper, however, is clear. Universal linguists and Basque grammarians can ill afford to neglect each other's work —indeed, they have a lot to learn from one another.

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