# Tense in Basque\*

Karlos Arregi

MIT, 21 July 2000

# 1 Introduction

In this paper, I provide an analysis of the syntax and morphology of tense in Basque.<sup>1</sup> In this language, there are two types of tenses: simple and compound. Following insights found in Laka (1990), in sections 3 to 5 I develop an analysis in which the difference between these two types of tenses is a simple syntactic one: in simple tenses, the verb moves to T; in compound tenses, it does not. Although the analysis is similar to Laka's in this respect, I will show that several semantic and morphological properties of these tenses argue in favor of certain important modifications to her analysis. In section 6 I examine certain facts about the syntax of negation and of focus that are relevant for the anlysis defended here. As we will see there, while the syntax of negation provides evidence for it, the syntax of focus seems to provide counterevidence against it. However, in §7, I show that the main facts of the syntax of focus in Basque can be derived from the phonological properties of focus in this language. This will allow me to develop a simple analysis of focus which, in turn, is compatible with the analysis of verbal syntax defended in the preceding sections.

# 2 Basque Tenses

All verbs in Basque can appear in four different (indicative) compound tenses.<sup>2</sup> These compound tenses are formed with a participle and an auxiliary, as exemplified in (1).<sup>3,4</sup>

<sup>\*</sup>I would like to thank the following people for helpful comments and discussion on different parts of the work reported here: David Embick, Irene Heim, Sabine Iatridou, Alec Marantz, Michael Kenstowicz, David Pesetsky, and Norvin Richards. All the data reported here come from my informant, Ikuska Ansola, who I warmly thank for all her help.

<sup>&</sup>lt;sup>1</sup>I will concentrate on the dialect spoken in the town of Ondarroa. Except otherwise noted, all the relevant data presented here are basically the same for most dialects of Basque.

<sup>&</sup>lt;sup>2</sup>There are two other indicative compound tenses in Basque which will not be discussed here. They are the future and the conditional, and both are formed with the future participle (which, in turn, is derived from the perfective participle) and an auxilairy (present and past, respectively).

<sup>&</sup>lt;sup>3</sup>In this paper, I will be using the following abbreviations: Abl(ative), Abs(olutive), All(ative), Asp(ect), Aux(iliary), Caus(atie), Dat(ive), Erg(ative), Gen(itive), Fut(ure), Imp(erfective), In(essive), Pl(ural), Pst (Past), Prf (Perfective), Pr(esent), Sg (singular).

<sup>&</sup>lt;sup>4</sup>In the Basque examples I will be using standard Basque orthography. This will be clear in most cases, except in the following: tz is a voiceless predorso-alveolar affricate /ts/, x is a voiceless alveopalatal fricative /ʃ/, and tx is a voiceless alveopalatal affricate /tʃ/.

- (1) a. Jon-ek liburu irakurr-i dau. Jon-Erg book read-Prf Aux.Pr *Jon has read the book.* 
  - b. Jon asarra-tzen sa-n. Jon get.angry-Imp Aux-Pst Jon used to get angry.

As shown in (2), the participle contains the main verb and one of the participial suffixes in (2a), and the auxiliary verb contains an auxiliatry stem (cf. 2b) and tense (cf. 2c).<sup>5</sup>

- (2) a. Paricipial suffixes:
  - i. *Perfective*, with allomorphs -tu,  $-\emptyset$ , -i, and -n.<sup>6</sup>
  - ii. Imperfective, with allomorphs -ten and -tzen.<sup>7</sup>
  - b. Auxiliary Stems:
    - i. The root of *ixan* 'be', with various allomorphs (mainly tx and  $\emptyset$ ), which is used in intransitive clauses. This verb is also the copular verb used with predicates denoting individual-level properties (cf. the Spanish verb 'ser').
    - ii. The root of *edun* 'have', with allomorphs *u* and *du*, which is used with transitive predicates. This verb is used exclusively as a tensed auxiliary.
  - c. What specific pieces realize T is not clear, but I will assume that it is  $-\emptyset$  in the present and *-n* in the past.

Since there are two possible values for tense and two different aspectual participles, Basque has four different compound tenses, which are shown in (3).<sup>8</sup>

(3) *Compound Tenses* 

	Perfective	Imperfective
Present	Pr Perfect ( <i>I have gone</i> )	Imperfective Pr (I go)
Past	Perfective Pst (I went)	Imperfective Pst ( <i>I used to go</i> )

<sup>&</sup>lt;sup>5</sup>The auxiliary is also inflected for agreement with absolutive, ergative and dative arguments, and for 'mood' (indicative, subjunctive, potential and imperative). In this paper I will not discuss agreement or mood, and will concentrate on indicative tenses.

<sup>&</sup>lt;sup>6</sup>The perfective participle is also the citation form of all verbs. The distribution of the four allomorphs is idiosyncratic, i.e. each verb selects a specific allomorph.

<sup>&</sup>lt;sup>7</sup>The distribution of the two allomorphs depends on the specific verb. Specifically, verbs which take the *-tu* allomorph of the prefective also take the *-tzen* allomorph of the imperfective (e.g. ar-tu - ar-tzen 'take'). Other verbs take the *-ten* allomorph (e.g.  $jo-\emptyset - jo-ten$  'hit', etorr-i - etor-ten 'come', ju-n - ju-ten). Furthermore, due to a general phonological rule in many dialects, the dental affricate *-tzen* becomes a stop after a fricative (e.g. from perfective *os-tu* 'steal', imperfective *os-tzen* > *os-ten*).

<sup>&</sup>lt;sup>8</sup>The labels I have used for the different tenses are only roughly indicative of their meaning, and have no theoretical import. See §4 for discussion on the meaning of imperfective tenses.

In addition to the four compound tenses described above, an extremely reduced number of verbs can also have two simple tenses: present and past. These verbs have both simple and compound tenses. In simple tenses, the main verb is directly inflected for tense (past or present), there is no (overt) aspectual morphology, and no auxiliaries are involved. These two simple tenses are exemplified in (4).

- (4) a. Umi-k etxi-n das. child-AbsPl home-In be(Pr) *The children are home.* 
  - b. Jon-ek liburu ekua-n. Jon-Erg book have-Pst *Jon had a book.*

As noted above, only a few verbs can appear in the simple tenses. In the dialect which concerns us here, these are the ones listed in (5). As shown there, some of them can only appear in the simple present.

- (5) a. Verbs with both past and present forms: ixan 'be', eon 'be',<sup>9</sup>euki 'have', jakin 'know', jun 'go'.
  - b. Verbs with no past forms: etorri 'come', erun 'carry, take', ibilli 'walk'.

Furthermore, these verbs do not seem to form any coherent class. They can be transitive (*have*, *know*, *carry*), or intransitive (*be*, *go*, *come*). With respect to aspectual classes, there are statives (*be*, *have*, *know*), activities (*carry*), and accomplishments (*come*). In order to distinguish them from the rest, I will use the traditional terms used in the Basque literature: 'synthetic' for the ones that can have simple tenses, and 'non-synthetic' for the ones that cannot. It is important to note that a synthetic verb is not a verb that only has simple tenses; rather, it is a verb that appears in *both* simple and compound tenses, as opposed to non-synthetic verbs, which can only appear in compound tenses.<sup>10</sup>

Therefore, one can see the difference between the two types of verbs as a pradigmatic difference. Synthetic verbs have a richer paradigm than non-synthetic verbs: both of them appear in compound tenses, but only the former appear also in simple tenses. This is illustrated in the table in (6), with the synthetic verb *jakin* 'know' and the non-synthetic verb *ikusi* 'see'.

<sup>&</sup>lt;sup>9</sup>The main difference between *ixan* and *eon* (both translatable as 'be') is in the kind of predicate they take as complement. Roughly, *ixan* goes with individual-level predicates, and *eon* goes with stage-level predicates. Their distribution is identical to Spanish *ser* and *estar*, respectively.

<sup>&</sup>lt;sup>10</sup>I have chosen the traditional term 'synthetic' for these verbs for ease of exposition, but the specific meaning given to this word in this paper (and in the Basque literature in general) should be clear. Also, as the reader may have noticed, I use the terms 'simple' and 'compound' for tense types, rather than 'synthetic' and 'analytic'. In sum, in this paper, 'simple' refers to tenses without auxiliaries, and 'synthetic' refers to a specific kind of verbs, i.e. those that can have simple tenses in addition to compound ones.

(6) Non-synthetic and Synthetic Verbs

	ikusi	jakin
Present Perfect	ikusi rau	jakin dau
Perfective Past	ikusi ban	jaki ban
<b>Imperfective Present</b>	ikusten dau	jakitxen dau
Imperfective Past	ikuste ban	jakitxe ban
Simple Present	*	daki
Simple Past	*	ekixen

# **3** The Syntax of Basque Tenses

There are many possible analyses of the facts about the morphology of Basque tense described in the previous section. These facts can be summarized as in (7-8).

- (7) a. A simple tense consists of a word containing the main verb and T.
  - b. A compound tense consists of a participle containing the main verb and a suffix, and another word containing an auxiliary verb and T.
- (8) a. Synthetic verbs can appear in both simple and compound tenses.
  - b. Non-synthetic verbs can only appear in compound tenses.

The two basic questions that must be answered are: (i) what property of synthetic verbs enables them to appear in simple tenses? and (ii) what mechanisms are involved in the derivation of simple and compound tenses? In this section, I address these questions by offering an analysis of the syntax and morphology of Basque finite verbal forms. The analysis is based on insights drawn from Laka's (1990) analysis of the same facts, although it differs from her account in important ways that are discussed below.

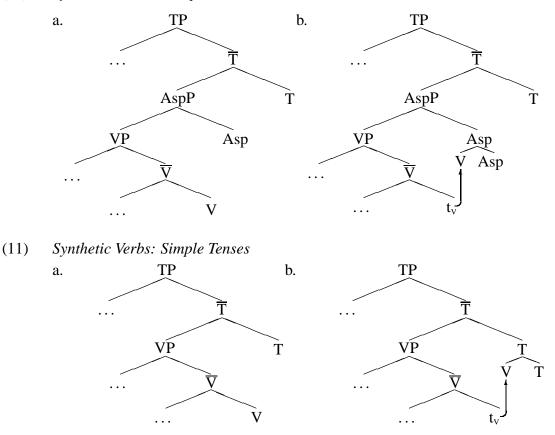
Let us begin with synthetic verbs, since they appear in both types of tenses. In order to determine the syntax of these tenses, it is important to know what meanings they have. As we saw in the previous section, compound tenses can be perfetive or imperfective, and present or past. The difference between perfective and imperfective is signaled by the suffix on the participle, and tense is realized on the auxiliary. Furthermore, simple tenses (present and past) are always imperfective. Thus, what must be determined first is what is the difference in meaning between the compound imperfetive tenses and the simple ones, since they are both imperfective. As I show in more detail in §4, the difference is also an aspectual one: the imperfective compound tense is habitual, and the simple tense is non-habitual. All these meaning differences are summarized in the table in (9).

(9) Synthetic Verbs

Form	Meaning
Perfective compound	Perfective
Imperfective Compound	Imperfective Habitual
Simple	Imperfective non-habitual

On the natural assumption that perfective and habitual are marked aspectual values, the simple tense thus corresponds to completely unmarked aspect. Therefore, I propose that the main syntactic

difference between simple and compound tenses is in an aspectual head: compound tenses involve an Asp projection, and compound tenses do not. Thus, the basic structures for the two types of tenses are the ones shown in (10-11).



(10) Synthetic Verbs: Compound Tenses

As shown in these structures, this structural difference results in different movements. In both, the verb moves to the closest functional head: Asp in compound tenses, and T in simple tenses. Let us assume that both movements are the consequence of the following morphosyntactic requirement: verbs must have inflection. In both structures, this requirement is satisfied by moving to the nearest inflectional head. Nothing further needs to be said about simple tenses, since V-to-T movement is enough to create the single word that appears in these tenses. In compound tenses, movement of the verb to Asp results in a participle, and I assume that a verbal root is adjoined to T to form the auxiliary.<sup>11</sup>

Thus, in this analysis, the difference between simple and compound tenses is syntactic: in simple tenses the verb moves to T, and in compound tenses it does not. This explains why the former involves one word and the latter two words. This analysis predicts that there should be other syntactic differences between the two tenses. Specifically, it predicts that whenever some movement affects T, it will move the tensed verb in simple tenses, and only the auxiliary in compound tenses. In sections 6 and 7, I discuss this prediction and its consequences for other areas of Basque grammar.

<sup>&</sup>lt;sup>11</sup>I assume that this is the result of a morphosyntactic requirement similar to the one imposed on verbs: inflectional categories (Asp and V) require a verbal root.

Consider now non-synthetic verbs. The main property that these verbs have is that they cannot appear in simple tenses. This immediately raises the following question: what type of tense do nonsynthetic verbs use in the contexts in which synthetic verbs use simple tenses? The answer, as one might expect, is that in this contexts, non-synthetic verbs use a compound tense. As we saw above, synthetic verbs use a simple tense when aspect is unmarked (i.e. imperfective non-habitual). As shown in more detail in §4, in order to express this same aspectual meaning, non-synthetic verbs use the imperfective compound tense. This difference between the two classes of verbs can be summarized as in the table in (12).

(12)	Morphology a	and Meaning i	in Basque Aspect
------	--------------	---------------	------------------

	Perfective	Imp. Habitual	Imp. Non-Hab.
Non-Synthetic Verbs	Compound <sub>Prf</sub>	Compound <sub>Imp</sub>	Compound <sub>Imp</sub>
Synthetic Verbs	Compound <sub>Prf</sub>	$Compound_{Imp}$	Simple

Imperfective meanings can be divided in two: habitual and non-habitual. The habitual imperfective meaning always uses the imperfective compound tense, regardless of the class of the verb. However, the non-habitual imperfective tense is conveyed with the simple or the imperfective compound tense, depending on whether the verb belongs to the synthetic class or not. In other words, with non-synthetic verbs the imperfective compound tense is ambiguous between a habitual and a non-habitual interpretation, whereas with synthetic verbs, the imperfective compound tense is not ambiguous, it only has the habitual interpretation.

Let us assume that the relation between syntax and semantics in this specific area is constant: a given aspectual meaning always corresponds to the same syntactic structure.<sup>12</sup> A consequence of this assumption is that the basic structures posited above for synthetic verbs are the same ones in non-synthetic verbs. Specifically, for all verbs, unmarked (i.e. imperfective non-habitual) aspect involves a structure without Asp (cf. 11b), and marked aspect involves a structure with Asp. As with synthetic verbs, the structure with Asp results in a compound tense. However, unlike synthetic verbs, the structure without Asp also results in a compound tense. Thus, in this specific case, V does not move to T. Therefore, we must impose the condition in (13) on V-to-T movement.<sup>13</sup>

(13) V-to-T Movement

V moves to T only if V belongs to the synthetic class.

Note that (13) only holds for V-to-T movement; movement from V to Asp in other tenses always occurs.

In this way, we account for the ambiguity described above. Specifically, since movement to T never occurs with non-synthetic verbs, the imperfective compound tense can be the result of two different structures (i.e. two different meanings): one with Asp, and a different one without Asp.

This brings us to the next question: what is the role of the participial suffixes? The analysis developed above imposes certain conditions on what the answer to this question can be. Specifically, the participle having the imperfective suffix -t(z)en is the result of two different structures

<sup>&</sup>lt;sup>12</sup>Obviously, this assumption needs justification. I discuss it in more detail in §5.

<sup>&</sup>lt;sup>13</sup>Note that something similar to (13) also holds in English: *be* and *have* move to T, but other verbs do not. The main difference between the two langaguages is that in English, the structure without raising results in lowering of T to V, and in Basque, it results in a compound tense.

with non-synthetic verbs: one when Asp is present and is imperfective and habitual, and a different one where Asp is not present. A necessary consequence of this is that the suffix -t(z)en is not the realization of Asp. In fact, as I argue in §5, there is evidence that neither of the participial suffixes described so far are the realization of Asp. As I show there, these suffixes are better described as fulfilling certain morphosyntactic requirements imposed on non-finite verbal forms. This part of the analysis is quite important, since it is one of the main differences between previous accounts of Basque tense and the one defended here.

The analysis developed above has several properties that need further discussion, a matter which I leave for the remainder of this paper. In §4 I discuss in more detail the semantics of imperfective tenses, which was used above to argue for the two basic syntactic structures posited in the present analysis. In §5, I examine in more detail the role played by participial morphology. As noted above, this is where the present analysis differs greatly from previous ones, so that section includes some discussion on previous analyses. Finally, sections 6 and 7 argue in favor of the syntactic part of the analysis. Specifically, in those sections I defend the proposal made above that the main difference between simple and compound tenses is in the presence versus absence of movement of the verb to T. As will be shown there, this part of the analysis has important consequences for other parts of Basque grammar.

#### **4** The Semantics of Imperfective Tenses

As noted above, an important property of simple tenses is that they are only possible with a few verbs, i.e. those in the synthetic class. An important question which is not addressed in previous analyses of the same facts is what morphology is used by non-synthetic verbs in the contexts where synthetic verbs use simple tenses. As was mentioned in the previous section, the answer to this question can be summarized as in the table in (12), repeated here as (14).

# (14) Morphology and Meaning in Basque Aspect

	Perfective	Imp. Habitual	Imp. Non-Hab.
Non-Synthetic Verbs	Compound <sub>Prf</sub>	Compound <sub>Imp</sub>	Compound <sub>Imp</sub>
Synthetic Verbs	Compound <sub>Prf</sub>	$Compound_{Imp}$	Simple

As shown in (14), there are three types of tenses according to their morphology: (i) perfective, which is always compound, (ii) imperfective compound, and (iii) simple. Perfective meanings are always conveyed using the perfective compound tense. Imperfective meanings can be divided in two: habitual and non-habitual. The habitual imperfective meaning always uses the imperfective compound tense (i.e. the one in which the participle has the suffix -t(z)en), regardless of the class of the verb. However, the non-habitual imperfective tense meaning is conveyed with the simple or the imperfective compound tense, depending on whether the verb belongs to the synthetic class or not. Let us then examine the meaning of imperfective tenses in more detail, since it is important in determining the syntax of tense.

The meaning of simple tenses depends greatly on the semantic type of the main verb. Specifically, different readings arise depending on whether the main verb is stative or eventive. With stative predicates, the simple present tense has the same meaning as its English counterpart, as illustrated in (15).

- (15) a. Jon-en liburu max-an da. Jon-Gen book table-In be.Pr Jon's book is on the table.
  - b. Jon altu re. Jon tall be.Pr *Jon is tall*.

With stage-level statives (cf. 15a), the simple present is used to convey that the property denoted by the predicate holds of the subject at the utterance time. On the other hand, as expected, with individual-level statives (cf. 15b), the simple present results in a generic statement about the subject. Similar results obtain in the past, as shown in (16).

- (16) a. Jon-en liburu max-an eu-an. Jon-Gen book table-In be-Pst Jon's book was on the table.
  - b. Jon altu sa-n. Jon tall be-Pst *Jon was tall.*

The meaning of the imperfective compound tense with these verbs is quite different from the simple tense. Consider the examples in (17).

- (17) a. Jon-en liburu max-an eo-ten da. Jon-Gen book table-In be-Imp Aux.Pr Jon's book is usually on the table.
  - b. Jon altu ixa-ten da. Jon tall be-Imp Aux.Pr Jon is usually tall.

As suggested by the translations, this tense has a habitual meaning. As expected, the resulting meaning with the individual-level predicate in (17b) is quite odd under normal circumstances: it implies that Jon's height could change from time to time. On the other hand, if the subject, unlike *Jon*, can be interpreted as referring to a non-specific individual, this habitual tense is not odd with individual-level predicates, as shown in (18).

(18) Amerikanu-k altu-k ixa-ten dis. American-AbsPl tall-AbsPl be-Imp Aux.Pr *Americans are usually tall.* 

To summarize so far, stative verbs belonging to the synthetic class can appear in two types of imperfective tenses: simple for non-habitual tense meanings, and compound for habitual tense meanings. On the other hand, non-synthetic verbs use the imperfective compound tense for *both* tense meanings, habitual and non-habitual. Consider the non-synthetic verb *esagutu* 'know' in (19).

- (19) a. Jon-ek Miren esagu-tzen dau. Jon-Erg Miren know-Imp Aux.Pr Jon knows Mary.
  - b. Jon-ek jente asko esagu-tzen dau. Jon-Erg people many know-Imp Aux.Pr Jon knows many people. Jon meets many people.

Under normal circumstances, (19a) is not interpreted as habitual. That is, with non-synthetic verbs, the imperfective compound tense is not necessarily interpreted as habitual, as it is with synthetic verbs. In fact, as in (19a), this interpretation is dispreferred. That it can also have a habitual meaning given the right context is shown in (19b). This sentence has two meanings. The first one shown in the translations is non-habitual, i.e. it is aspectually identical to (19a). However, it can also have a habitual meaning, which corresponds to the second translation shown. In this habitual reading, 'know' is coerced into the meaning 'get to know, meet'.

It is useful to compare the non-synthetic verb *esagutu* with the synthetic verb *jakin*, since they have similar meanings. They are both translated as *know* in English, but they have different uses. *Jakin* is similar in meaning to Spanish *saber*, i.e. it takes sentential complements and is also used to express knowledge of particular languages, as in English *John knows Basque*. On the other hand, *esagutu* is similar to Spanish *conocer*, and is used with the meaning 'be acquainted with'. It tipically takes nominal complements, as in English *John knows Mary*. Some examples of the non-synthetic verb *esagutu* are given in (19). Compare these examples with (20), which contains sentences with the synthetic verb *jakin*.

- (20) a. Jon-ek ingles-a daki. Jon-Erg English-AbsSg knows Jon knows English.
  - b. Jon-ek erantzun-ak jaki-txen dau. Jon-Erg answer-AbsPl know-Imp Aux.Pr *Jon usually knows the answers.*

In the case of *jakin*, both the simple and the compound tense are available. As shown in (20), the simple tense is used with the non-habitual meaning and the compound tense with the habitual meaning. In particular, the compound tense in (20b) can only have the habitual interpretation. On the other hand, with the non-synthetic verb *esagutu*, only the compound tense is available, and, as shown above (cf. 19), this tense can be used with both the habitual and the non-habitual meanings.

Similar conclusions can be reached for eventive verbs. With eventive verbs belonging to the synthetic class, there is a clear contrast in meaning between the simple and compound tense. Consider the examples in (21), which contain the synthetic verb *jun* 'go'.

- (21) a. Au tren-a aringainge ru. this train-AbsSg fast go.Pr *This train goes fast.* [Ability]
  - b. Au tren-a aringainge ju-ten da. this train-AbsSg fast go-Imp Aux.Pr *This train goes fast.* [Habitual]

The simple tense in (21a) has an ability reading, while the one in (21b) has a habitual reading. Thus, while the former does not necessarily entail that the train being talked about has ever gone fast, the latter does. In fact, 'this train' in (21a) could refer to a non-existing train (e.g. it could refer to the design of a train), but not in (21b). On the other hand, with non-synthetic verbs, the imperfective compound tense can be used with both meanings, as illustrated in (22).

(22) Au asensor-a bost mille kilo altza-ten daus.
 this elevator five thousand kilo lift-Imp Aux.Pr
 This elevator lifts five thousand kilos. [Ability/Habitual]

(22) can have both the habitual and the ability readings. As expected in the present analysis, nonsynthetic verbs only have the imperfective compound tense available, so they must use it to convey both meanings.

Another possible reading of simple tenses is the futurate. Consider the examples of the synthetic verb *jun* 'go' in (23).

- (23) a. Jon Bilbo-a ru bixar. Jon Bilbao-All goes tomorrow Jon is going to Bilbao tomorrow.
  - b. \* Jon Bilbo-a ju-ten da bixar. Jon Bilbao-All go-Imp Aux.Pr tomorrow

As shown in (23), the simlpe present tense has a futurate reading. However, in the compound imperfective tense (cf. 23), this reading is not available. On the other hand, with non-synthetic verbs, where only the compound tense is available, the futurate reading is obtained with this tense, as shown in (24).

(24) Athletic-ak bixar jolas-ten dau. Atletic-Erg tomorrow play-Imp Aux.Pr *The Athletic is playing tomorrow.* 

Thus, we now have a more detailed answer to the question raised at the beginning of this section: in the contexts where synthetic verbs use a simple tense, non-synthetic verbs use the imperfective compound tense. In other words, with non-synthetic verbs the imperfective compound tense is ambiguous between a habitual and a non-habitual interpetation, whereas with synthetic verbs, the imperfective compound tense is not ambiguous, it only has a habitual meaning, and the simple tense has a non-habitual meaning.

The important part of the above description is the one referring to imperfective non-habitual meanings with non-synthetic verbs. As noted above, in this case non-synthetic verbs use the imperfective compound tense, and synthetic verbs use the simple tense. In the analysis developed in the previous section, these facts were captured in the following way. Under the assumption that each aspectual meaning always corresponds to the same syntactic structure, I proposed that imperfective non-habitual aspect never involves an Asp head, as opposed to other aspectual meanings, which always involve an Asp head. Furthermore, in the structure without Asp, V moves to T if V belongs to the synthetic class, but not if it belongs to the non-synthetic class. The result is that

the imperfective compound tense can be the result of two different structures when the verb is non-synthetic: one with Asp, and another one without Asp.

Consider an alternative analysis, which was proposed in Laka (1993) and Ortiz de Urbina (1994). These authors assume that simple tenses *never* involve Asp, and that compound tenses *always* involve Asp. This implies that, in a sentence with a non-synthetic verb and imperfective non-habitual aspect, Asp is present. This would explain why in this case a compound tense is used. The problem with this analysis is that it implicitly assumes that for a given aspectual meaning, i.e. imperfective non-habitual, the presence of Asp depends on whether the verb is synthetic or not. In other words, in this alternative analysis, the same apsectual meaning is expressed using different structures, depending on the class of the main verb. This would make sense if there were any systematic semantic difference between synthetic and non-synthetic verbs. In that case, it would be plausible that, in order to obtain the same kind of aspectual meaning, the two kinds of verbs would make use of different structures.<sup>14</sup> As we saw in §2, there is no systematic semantic difference between synthetic verbs. Thus, the analysis defended here has the advantage that it does not need to posit structural differences in the absence of semantic differences.

# 5 Participial Morphology and Its Relation to Aspect

As shown in §3, and important part of the analysis proposed here is that participial suffixes are not the realization of Asp. In this section I discuss this aspect of the analysis, and compare it to previous analyses, in which it is assumed that participial suffixes are the realization of Asp.

In Laka (1990), it is proposed that all participial suffixes are the realization of Asp. In this analysis, all tenses, including simple ones, involve an aspectual projection. In all tenses, V moves to Asp, and the difference between simple and compound tenses is that in the former V+Asp moves further to T, while in compound tenses it does not. This analysis and the one defended here are very similar in certain respects. Specifically, in both the difference between simple and compound forms has to do with movement of V all the way up to T. The main difference between the two analysis is that in the one proposed here, not all tenses involve ans Asp projection. Let us examine this difference in more detail.

In Laka's analysis, Asp plays a crucial role in determining whether there is movement to T. Specifically, noting that there is no overt realization of Asp in simple tenses, she proposes that movement from Asp to T occurs only when Asp is realized as  $\emptyset$ . Since, according to her, in compound tenses Asp is realized overtly, in these tenses there is no movement from Asp to T. Although this derives the main differences between simple and compound tenses, it rests on the false assumption that participial affixes are always overt. As shown in §2, one possible allomorph of the suffix appearing in the perfective participle is precisely  $-\emptyset$ . Although this participial suffix is not very common in standard Basque, it is in fact quite common in Ondarroa Basque: all recent borrowings from Spanish have this zero suffix in the perfective participle (e.g. *kanta-\O* 'sing', *mobiu-\O* 'move'). Since Spanish borrowings are one of the most productive ways of introducing new words into this dialect, this participial suffix is very common. Furthermore, it also appears with a few verbs which are not borrowings, such as *jo* 'hit' and *erre* 'burn'. However, all verbs that take this suffix in the perfective are non-synthetic. Thus, the one-to-one correlation between non-

<sup>&</sup>lt;sup>14</sup>For instance, this is the case of the present progressive meaning in English. While stative verbs use the simple present tense, eventive verbs must use the periphrastic present progressive.

overtness of Asp and movement to T expected in Laka's analysis is broken in this case. Therefore, the assumption that Asp is realized as zero with synthetic verbs in non-habitual imperfective aspect is not enough to trigger movement from Asp to T.

Thus, the main advantage of the analysis defended here over Laka's is that it does not rely on the realization of participial suffixes, but on the presence or absence of an Asp projection. However, as noted in §3, this analysis raises interesting questions about participial morphology precisely because of this fact. In particular, there are two types of structures that result in compound tenses: in imperfective non-habitual tenses, there is no Asp projection; in other tenses, Asp is present. This means that when the verb is non-synthetic, the imperfective compound tense is the result of two different structures, one with Asp and onother one without Asp. Thus, since both involve the same participial suffix, i.e. -t(z)en, we are forced to conclude that, at least in some cases, participial suffixes are not the realization of Asp. In fact, as I show below, there is reason to believe that none of the participial suffixes that we have seen so far is the direct realization of Asp.

In order to see how this is the case, we have to take a more thorough look at the distribution of participial suffixes. Consider first the one that appears in the perfective participle. As we saw in §2, this suffix can be -tu,  $-\emptyset$ , -i, or -n, depending on the specific verb. Let us refer to this participial suffix as -TU. -TU is not limited to perfective tenses; it has several other uses. Some of them can be described as perfective. For instance, it is used to form deverbal adjectives, where it is followed by the suffix -ta, as shown in (25).

(25) Au max-e apur-tu-te ra. this table-AbsSg break-TU-TA is *This table is broken*.

In this specific use, the verb has a perfective component: all deverbal adjectives of this kind are always understood as perfective, as shown in the translation to (25). However, there are other uses of -TU which are clearly not perfective. Consider (26), where the main verb is focused.

- (26) a. **Idatz-i** ei-ñ ddot liburo bat. write-TU do-TU Aux.Pr book one *I have WRITTEN a book*.
  - b. **Idatz-i** e-txen dot liburu-k. write-TU do-Imp Aux.Pr book-AbsPl *I WRITE books*.

In verb focus constructions, the verb ein is used. Both this verb and the main verb are in a participial form. As can be seen in the examples, the main verb always has the participial suffix -TU, while the suffix on ein is the one that determines the aspect of the sentence. Thus, even though in this construction the main verb has the participial suffix -TU, it does not contribute anything to the aspectual interpretation of the sentence. Note, furthermore, that one cannot say that there are two homophonous -TU suffixes, one having a perfective interpretation, and another one without it. As was said above, there are four -TU allomorphs. Furthermore, each verb always uses the same allomoph of -TU in all the contexts where this suffix is required. An account in which there were homophonous -TU's would not be able to account for these facts. Thus, under the natural assumption that -TU has the same meaning in all the contexts in which it appears, the conclusion must be that -TU is never interpreted as an aspectual suffix.

Something similar can be said about -t(z)en, the suffix appearing in imperfective participles. First, it must be noted that -t(z)en is in fact bimorphemic: it contains the suffix -t(z)e and the inessive case suffix -n. -t(z)e is a verbal suffix which appears in several types of non-finite clauses, and is always followed by some case suffix. (27) contains some relevant examples.

- (27) a. Jon-ek liburu irakur-ti nai rot. Jon-Erg book.AbsSg read-TE.AbsSg want Aux.Pr *I want Jon to read the book.* 
  - b. Oi-de ju-te-ko ordu re. bed-All go-TE-Gen time is *It's time to go to bed*.
  - c. Postri ja-te-a nu. dessert eat-TE-All go.Pr *I'm going to eat dessert.*
  - d. Txarto porta-te-atxik, egun bi eon-go sa kastigata. bad behave-TE-Caus day two be-Fut Aux.Pr grounded *For behaving badly, you'll be grounded for two days.*

It is often quite transparent what case suffix is needed in each case. In (27a), the embedded clause *Jonek liburu irakurti* is the complement of the verb *nai* 'want', so it is in the absolutive. In (27b), the non-finite clause *Oide juteko* is the complement of the noun *ordu* 'time', so it is in the genitive case, as is usual with noun complements. The construction in (27c) is similar to the English one used in the translation, which uses the verb *go* and an infinitival clause with an allative case marker. Finally, the causative suffix in the non-finite clause in (27d) is also intepreted transparently, as shown in the glosses.

On the other hand, there are certain non-finite -t(z)e clauses where it is not clear why they have the case suffix they have. For instance, as illustrated in (28), verbs taking non-finite complements which are intepreted as commands typically require the -t(z)e form to have the genitive suffix -*ko*.

(28) Jarabi ar-tze-ko aiñ-du sta ama-k. syrup take-TE-Gen order-TU Aux.Pr mother-Erg *My mom ordered me to take the syrup.* 

Something similar can be said about the inessive case suffix -*n* that appears in the imperfective compound tenses. This form of the -t(z)e participle appears in non-finite clauses embedded under certain verbs, including perception verbs (cf. 29a), verbs of knowledge (cf. 29b)<sup>15</sup>, some aspectual verbs (cf. 29c), and with the copula *eon* (cf. 29d) in the progressive construction.

(29) a. Liburu irakur-te-n ikus-i neba-n. book read-TE-In see-TU Aux-Pst *I saw him reading the book.* 

<sup>&</sup>lt;sup>15</sup>Specifically, verbs of knowledge like *jakin* 'know' and *astu* 'forget' take inessive complements when used to express (loss of) ability.

- b. Jon-ek txistu jo-te-n daki. Jon-Erg flute play-TE-In knows Jon can play the flute.
- c. Atzo au liburu as-i nitxa-n irakur-te-n. yesterday this book begin-TU Aux-Pst read-TE-In *I began to read this book yesterday.*
- d. Jon liburu irakur-te-n da.
  Jon book read-TE-In be.Pr
  Jon is reading a book.

The participial suffix used in imperfective compound tenses is identical to this, i.e. it is actually composed of the suffix -t(z)e and the inessive marker -n.

What all these examples show is that it is not the case that the suffix -t(z)en in compound tenses is the direct realization of an Asp node (although it is clearly indirectly related to it). Rather, it is composed of two suffixes, each having its own syntactic and morphological role. Therefore, I propose the following analysis of participial suffixes. First, a verb in Basque can appear in two dfifferent types of forms: tensed and not tensed. Obviously, a tensed verb is the result of the verb moving to T; otherwise it is not tensed. When it is not tensed, i.e. when it is a participle, the verb must have either the -TU suffix or the -t(z)e suffix, which I assume is the result of a morphological condition that requires some kind of inflection on verbs. In tensed verbs, this condition is satisfied by T; in participles, it is satisfied by these suffixes. What specific suffix is needed is determined by the context. Specifically, in compound tenses, the suffix -TU is used when Asp is perfective, and -t(z)e is used elsewhere. Finally, there is a further morphological requirement on the suffix -t(z)e: it must have a case suffix. What case is chosen depends on the specific context in which it appears. In compound tenses, and when selected by the verbs in (29), this case is inessive. This is by no means a complete analysis of participial suffixes. However, a more detailed account would involve examining in more detail the syntax of non-finite complementation in Basque, a topic which I leave for future research.

# 6 More on the Syntax of Basque Tense

So far, I have been assuming that movement of the verb to T in simple tenses occurs in the syntax, and, furthermore, that it is absent in compound tenses. In this section, I will review some of the literature on this topic. In §6.1, I present the evidence from negative clauses found in Laka (1990) in favor of this part of the analysis. Specifically, negative sentences show that (i) V-to-T movement is syntactic, and (ii) this movement is absent in compound tenses. In §6.2, I review the proposal about focus movement found in Ortiz de Urbina. In this work, a specific analysis of the syntax of focus is proposed in which all tenses, including compound ones, involve V-to-T movement, thus providing apparent counter evidence for the analysis defended here. Thus, the following two sections will present conflicting arguments about the syntax of tense in Basque. In order to solve this problem, I explore an alternative analysis of the syntax of focus in §7, which is compatible with the syntax of tense assumed here.

# 6.1 Negative Fronting

In the analysis defended in this paper, the verb moves to T only in simple tenses; in compound tenses, it does not. Thus, in the former, the verb and T form one complex head, while in the latter, the participle and the auxiliary form two different complex heads. As argued for in Laka (1990), evidence in favor of this difference between simple and compound tenses comes from negative sentences.

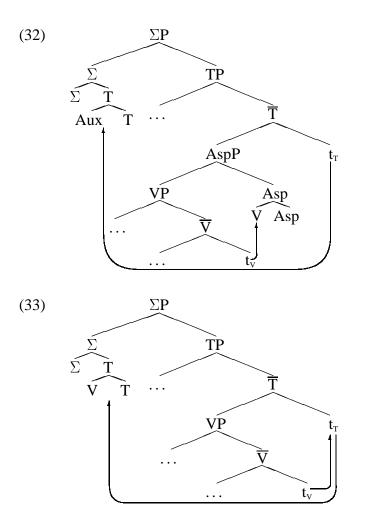
The neutral word order in Basque is SOV in simple tenses, and SOVAux in compound tenses. However, in negative tenses, this basic word order is changed. Consider the examples in (30, 31).

- (30) a. Jon-ek ingles-a daki. Jon-Erg English-AbsSg knows. Jon knows English.
  - b. Jon-ek es daki ingles-a. Jon-Erg not knows English Jon doesn't know English.
- (31) a. Jon-ek Miren ikus-i dau. Jon-Erg Miren see-Prf Aux.Pr Jon has seen Miren.
  - b. Jon-ek es dau Miren ikus-i. Jon-Erg not Aux.Pr Miren see-Prf

Jon has not seen Miren.

As can be seen in (30b, 31b), in negative clauses, the tensed verb must be right-adjacent to the negative particle *es*; otherwise, the sentence is ungrammatical. For reasons that will become clear below, we will call this phenomenon 'negative fronting'. In this construction, the auxiliary is treated as a complex head separate from the participle, thus providing evidence for the analysis defended here. Laka (1990) provides the following analysis, which is the one that I will assume here. She proposes that negative morphemes like Basque *es* belong to the category  $\Sigma$  (which can also contain other types of morphemes). Where this head is generated in the structure of a sentence is subject to parametric variation. In Basque, she proposes that it is above T, and furthermore, she assumes that  $\Sigma P$  is left-headed, unlike other categories in Basque, which are always right-headed. In order to account for negative fronting, she proposes that T must move to adjoin to the right of  $\Sigma$ . The result of this movement in both compound and simple tenses is shown in (32, 33).<sup>16</sup>

<sup>&</sup>lt;sup>16</sup>Why T has to move to  $\Sigma$  is a question that I will leave for future work. Laka's own answer is that it is due to her Tense C-command Condition, which requires T to c-command all functional categories at S-structure.



The result of this movement is that the tensed verb is on the left edge of the clause, to the immediate right of the negative morpheme. Furthermore, in compound tenses, the participle is left behind. Note also that in this analysis the subject ends up to the right of the tensed verb. This might seem problematic, since, as exemplified in (30b, 31b), the subject tends to be to the left of the negative morpheme. However, as shown in (34), it is also possible to have the subject to the right of the tensed verb.

(34) Es dau Jon-ek Miren ikus-i. Not Aux.Pr Jon-Erg Miren see-Prf Jon has not seen Mary.

What this analysis of negative fronting captures directly is the fact that the tensed verb is rightadjacent to the negative morpheme, and to the left of the participle in compound tenses. The fact that other constituents can appear in different positions, e.g. before or after the tensed verb, is expected, given the relative freedom of word order in Basque.

Negative fronting provides an argument for the analysis of Basque tense defended here. Since the participle and the auxiliary form two different complex heads, negative fronting can only affect the auxiliary. If, on the other hand, the verb moved to T compound tenses, we would expect negative fronting to affect both the participle and the auxiliary at the same time, giving the wrong results. Furthermore, negative fronting also provides evidence for the syntactic nature of the movement of the verb to T in simple tenses, since the presence or absence of this movement has an effect on the syntax of negative fronting.

# 6.2 Focus Movement

In this section, I examine the syntax of focus in Basque, and review the analysis of this phenomenon developed in Ortiz de Urbina (1989, 1994). As will become clear below, this analysis of the syntax of focus is relevant for the syntax of tense in Basque, since it seems to present counterevidence for the claims about the syntax of Basque tenses defended in this paper.

In Basque, focused constituents must be left-adjacent to the verb. This includes contrastively-focused phrases and *wh*-phrases. Some examples are shown in (35-38).

- (35) a. Ser daki Jon-ek? what knows Jon-Erg *What does Jon know?* 
  - b. Jon-ek ser daki?
  - c. \* Ser Jon-ek daki?
  - d. \* Jon-ek daki ser?
- (36) a. Señ-ek daki ingles-a?who-Erg knows English-AbsSgWho knows English?
  - b. Ingles-a señ-ek daki?
  - c. \* Señ-ek Ingles-a daki?
  - d. \* Ingles-a daki señ-ek?
- (37) Ser daki Jon-ek? what knows Jon-Erg What does Jon know?
  - a. Ingles-a daki Jon-ek. English-AbsSg knows Jon-Erg Jon knows ENGLISH.
  - b. # Ingles-a Jon-ek daki.
- (38) Señ-ek daki ingles-a? who-Erg knows English-AbsSg Who knows English?
  - a. Jon-ek daki ingles-a. Jon-Erg knows English-AbsSg JON knows English.
  - b. # Jon-ek Inlges-a daki.

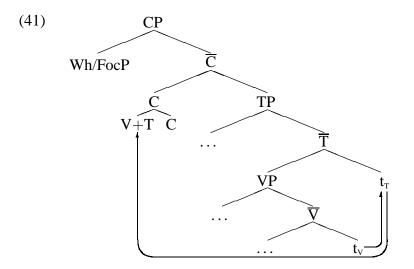
As shown in all the questions in these examples, the wh-phrase must be left-adjacent to the verb. Furthermore, in the appropriate answers to the questions in (37, 38), the focused constituent (i.e. the 'answer' to the question) must also be left-adjacent to the verb.

All the examples considered so far contain a simple tense. A similar requirement holds with compound tenses, but in an interesting way. Specifically, as illustrated in (40), *wh* and focused constituents must be left-adjacent to the participle.

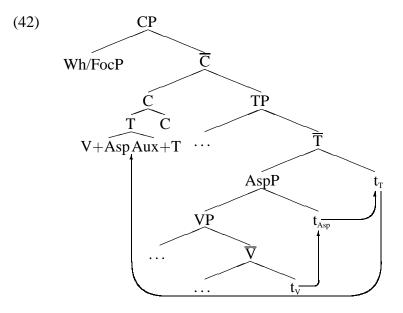
- (39) a. Señ-ek ikus-i dau Miren? who-Erg see-Prf Aux.Pr Miren *Who has seen Miren?* 
  - b. \* Señ-ek Miren ikus-i dau?
- (40) a. Jon-ek ikus-i dau Miren. Jon-Erg see-Prf Aux.Pr Miren JON has seen Miren.
  - b. # Jon-ek Miren ikus-Prf dau.

It is important to note that the requirement is on the participle, not on the tensed verb. Furthermore, as in sentences without focus, the auxiliary must be immediately after the participle.

Ortiz de Urbina (1989) proposes an account of these constructions in which this adjacency requirement is basically treated in the same way as V2 phenomena. Specifically, he proposes that focus and *wh*-phrases must move overtly to a designated focus position, which he identifies as [Spec, CP]. Furthermore, T must move to C, as in the standard analysis of V2 phenomena, thus accounting for the adjacency between the focus phrase and the tensed verb in simple tenses.



Furthermore, in order to capture the facts in compound tenses, he proposes that the participle and the auxiliary also move as a unit to C, thus providing evidence for movement of the verb to T in compound tenses as well as in simple tenses. The resulting structure is as in (42).



Ortiz de Urbina assumes that the movement of the verb to T in simple and compound tenses has different properties. In compound tenses, V adjoins to T. However, in simple tenses, a different type of structure is created, which he terms 'amalgamation', and which I have represented in the structures above with the boundary symbol + to distinguish it from adjunction. In this way, he intends to capture the fact that compound tenses consist of two words, while simple tenses consist only of one. Nevertheless, Ortiz de Urbina does not give details as to the nature of this structural difference, or as to how amalgamation results in a single word and adjunction in two words. One of the main advantages that our analysis (and Laka's) of the syntax of tense has over Ortiz de Urbina's is that it offers a straightforward account of this difference between simple and compound tenses.

Unless an alternative account of focus and *wh*-constructions is given, it seems that we have conflicting evidence about the analysis of the syntax of tense defended in this paper, where it is assumed that the verb does not move to T in compound tenses. Such an alternative account has been offered in Laka and Uriagereka (1987) and is further developed in Uriagereka (1992, 1999), where the adjacency between the participle (or the tensed verb in simple tenses) and the focus/*wh*-phrase is attributed to more general conditions on phrasal movement. However, Albizu (1992), where he defends Ortiz de Urbina's analysis, does not agree with some crucial judgements given in the works mentioned above (see Albizu 1992 for details). In my own experience, I have found no native speaker accepting those judgements, so I cannot adopt that analysis.<sup>17</sup>

Therefore, if the analysis of Basque tense defended here is to be maintained, we must look for an alternative analysis of focus and *wh*-constructions in Basque which does not involve movement of the verb to tense in compound tenses. Furthrmore, an analysis along these lines will have the advantage of being also compatible with the facts about negative fronting presented in the previous section. I sketch such an account of focus constructions in the next section, where it is shown that the prosody involved in focusing strategies in Basque can shed some light into the syntactic properties of focus and *wh*-phrases in this language.

<sup>&</sup>lt;sup>17</sup>For instance, Uriagereka (1992) claims that the object can intervene between a focused subject and the verb. My informant disagrees completely with this judgement.

# 7 The Syntax of Focus

In this section, I outline an analysis of the syntax of focus in Basque which, contrary to previous analyses, does not posit a designated syntactic postion for focus and *wh*-phrases. Specifically, I show that the word order properties of these constructions can be derived in an elegant way once the prosody involved in these constructions is taken into account. Although the analysis outlined here is quite different from previous analysis of focus in Basque, there are several analysis in the literature which share some of the aspects of the analysis developed below. These include Costa (1998), Vallduví (1995), and Neeleman and Reinhart (1998). Since the main purpose of this section is to outline an analysis of focalization compatible with the facts about the syntax of verbs discussed so far, I will not review these analysis here, and refer the reader to the references given above.

It must be noted that one of the greatest sources of dialectal variation in Basque is prosody. Thus, Hualde (1999) describes twelve different subvariaties with respect to stress, each in turn having some internal variation.<sup>18</sup> Since in this paper I am concentrating in one dialect, the one spoken in Ondarroa, the results reported here can only be considered conclusive for this dialect. Thus, even though the word order facts in focus constructions are basically the same in all dialects, whether the analysis offered here holds for all Basque dialects is not at all clear, and I will leave this question for further research.

Since a crucial part of the analysis has to do with stress, we must first examine some of the basic facts about stress in Ondarroa Basque.

# 7.1 Stress in Ondarroa Basque

The dialect spoken in Ondarroa is one of the western pitch accent dialects.<sup>19</sup> As in other pitch accent languages, stress is realized phonetically by a sharp drop in pitch beginning on the stressed syllable. Another important property of many pitch accent languages is that some words are accented, while others are not.<sup>20</sup> For a word to be accented means that it will receive stress always on the same syllable, i.e. the penultimate. On the other hand, unaccented words do not have stress on a fixed syllable, or may not even have stress. Thus, compare the words *gixona* 'the man (Abs)' and *gixónak* 'the men (Abs)'. While the former is unaccented, the latter is accented (plural words are always accented). Consider the examples in (43-44).

- (43) a. Etorri rís gixónak. come.TU Aux.Pr men.Abs *The men HAVE come.* 
  - b. Gixónak tís. men.Abs are *They are men.*

<sup>&</sup>lt;sup>18</sup>To get an idea of the variation that can be found one need only compare some very basic properties of the two main varieties: while western dialects, such as the one spoken in Ondarroa, are pitch accent dialects, central and eastern dialects are stress dialects.

<sup>&</sup>lt;sup>19</sup>For a more complete description of stress in Ondarroa Basque, see Hualde (1996).

<sup>&</sup>lt;sup>20</sup>Whether a given word is accented or not depends on its morphological make-up. Specifically, some morphemes make the word they are contained in accented. Thus, if a word contains one or more of these marked morphemes, it is accented; if it contains none, it is not.

- c. Gixónak tátos. men.Abs come *The men are coming*.
- (44) a. Gixóna etorrí re. man.AbsSg come.TU Aux.Pr *The man has come.* 
  - b. Gixon**á** ra. man.Abs is *He is a man*.
  - c. Gixona rátor. man.Abs comes *The man is coming*.

The position of stress in unaccented words depends on the syntactic position of the word. Although this is an important aspect of the phonology of stress in this dialect, I will not explore its details, since they are not relevant for the analysis of focus constructions given below.

Among all the stresses that a sentence may have, there is one which is more prominent. This higher prominence is realized phonetically in two ways. First, the pitch range of the phrase containing sentence stress is higher than it would be if it did not have sentence stress, and, second, it causes a sharp drop in pitch range in all syllables following it.<sup>21</sup> One important property of the syntax of focus Basque which previous accounts have not taken into account is its relation to stress. As I will show below, focused phrases in Basque always receive sentence stress, a fact which I will show allows us to explain many of the syntactic properties of focus.

Thus, it is important to first determine what the position of sentence stress is. In this paper I do not offer an analysis of sentence stress in Ondarroa Basque, and will only concentrate on the aspects that are relevant for the analysis of the syntax of focus which is proposed in the next section. Sentence stress in this dialect (as in all pitch accent dialects of Basque) follows the generalizations in (45).

- (45) Sentence Stress in Ondarroa Basque
  - a. Compound Tenses. Sentence stress is on the phrase preceding the participle.
  - b. *Simple Tenses*. Sentence stress is on a phrase formed by the tensed verb and the immediately preceding constituent.

Sentence stress with compound tenses is illustrated in (46), while simple tenses are illustrated in (47).<sup>22</sup>

(46) a. Jonek [gixôn bat] ikusí rau. Jon.Erg man one see.TU Aux.Pr Jon saw a man.

<sup>&</sup>lt;sup>21</sup>For more details of the phonetic facts, see Hualde et al. (1994) and Elordieta (1997), both of which discuss the dialect of Lekeitio, which is very similar to the one described here.

<sup>&</sup>lt;sup>22</sup>In these examples, and in all the subsequent ones, I mark the vowel bearing sentence stress with a circumflex accent.

- b. Jonek [arbôla bat] ikusí rau. Jon.Erg tree one see.TU Aux.Pr Jon saw a tree.
- (47) a. Etxî re. house.AbsSg is *It's a house*.
  - b. Gixona râtor. man.AbsSg comes *A man is coming*.

In both sentences in (46), sentence stress is on the phrase preceding the participle, i.e. the object. Furthermore, in the examples with simple tenses (cf. 47), sentence stress is on a phrase formed by the phrase preceding the tensed verb and tensed verb itself.<sup>23</sup>

# 7.2 Sentence Stress and Focus

In this section, I show that the special word order that appears in focus constructions follows from natural assumptions about the relation of focus and prosody, and from the specific properties of Basque prosody examined in the previous section.

It is a fact about focus and *wh*-phrases in Basque that they always receive sentence stress. Thus, regardless of what one assumes about the syntax of these constructions, one must assume the condition in (48).

(48) Focus and *wh*-phrases have sentence stress.

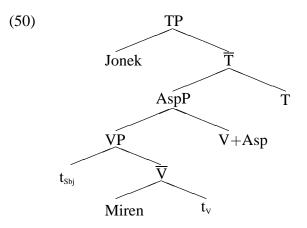
This condition is illustrated in the examples in (49), all of which contain a focused consituent.

- (49) a. Jonek Mîren ikusí ban. Jon.Erg Miren see.TU Aux.Pst Jon saw MIREN.
  - b. Míren Jônek ikusí ban. Jon.Erg Miren see.TU Aux.Pst JON saw Miren.

I propose that in fact, (48) is all that is needed to account for the syntax of focus. As we saw in the previous section, sentence stress is assigned to the phrase preceding the participle (cf. 45a), and in sentences with simple tenses, sentence stress is assigned to the phrase formed by the preverbal constituent and the tensed verb (cf. 45b). Let us consider how these facts, together with (48), can account for the position of focus and *wh*-phrases.

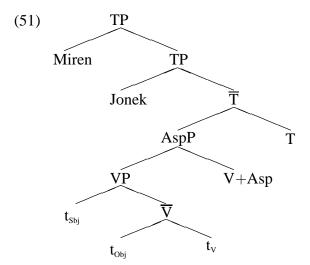
Let us consider first the two sentences in (49), which contain compound tenses. The only difference between the two sentences is that in (49a), the object is focused, and in (49b), the subject is focused. Thus, they both have the basic structure shown in (50).

 $<sup>^{23}</sup>$ To show that in this last case the preverbal consituent and the verb form a phrase would take us too far afield. For the purposes of this paper, it is enough to note that in these cases sentence stress falls on the penultimate syllable of this phrase, so that stress will fall on the verb if it has more than one syllable (cf. 47b), but on the word preceding it if the verb is monosyllabic (cf. 47a). See Hualde et al. (1994) and Elordieta (1997) for details.



In (49a), the object is focused. Given the facts about sentence stress examined in the previous section, the structure in (50) satisfies the condition that the focused phrase have sentence stress, since the focused object in its base position is before the participle. Thus, in this case, the resulting structure is identical to the one in which there is no focus. This is a welcome result, since this sentence, as all sentences with object focus, is identical to its counterpart without focus with respect to word order and stress.

Now consider (49b), where the subject is focused. In this case, something must be done to the basic structure in (50b), since the subject is not in a position where it will receive sentence stress: the object intervenes between it and the participle. In this case, some movement must occur so that the subject is left-adjacent to the participle. Thus, I propose that in this case, the object is adjoined to IP, giving the structure in (51).



In the resulting structure, the focused subject is left-adjacent to the participle, therefore satisfying the conditions to receive sentence stress.

An important thing to note is that the movement deriving (51) does not move the focused consituent. Rather, it moves another consituent so that the focused consituent can have sentence stress. I assume that this movement, which occurs in the syntax, is optional, in the sense that it is not driven by focus. Thus, movements like this can occur freely in the syntax, and the PF condition (48) on focused consituents rules out sentences in which the focused consituent is not left adjecent to the verb.

The same analysis also accounts for the syntax of focus in sentences with simple tenses. The two sentences in (52) are relevant examples.

- (52) a. Jonek [ sagarra râkar ]. Jon.Erg apple.AbsSg has Jon has the APPLE.
  - b. Sagarra [Jonek dâkar]. apple.AbsSg Jon.Erg has JON has the apple.

In (52a), the basic structure of the sentence is not altered, resulting in focus on the object. In this case, as expected, the focused object and the verb form a phonological phrase to which sentence stress is assigned, thus satisfying the prosodic conditions in focus. On the other hand, in (52b), the object has been moved to the left, resulting in focus on the subject. As a consequence of this movement, the focused subject is left-adjacent to the verb. Thus, the auxiliary and the subject form a phonological phrase, to which sentence stress is correctly assigned. Note that in simple tenses the relation between the phonology and semantics of focus is not as direct as in compound tenses. Specifically, the phrase in which sentence stress is assigned in simple tenses does not include only the focused phrase; it also includes the tensed verb. On the other hand, in compound tenses, the phrase receiving sentence stress only includes the focused phrase. However, as should be clear from the discussion above, this fact is independent from the semantics and phonology of focus, i.e. it is always the case that the tensed verb forms a phonological phrase with the constituent preceding it. Thus, this is a fact to be accounted for in a detailed account of the phonology of tensed verbs, and the right analysis of it should not be incompatible with the anlysis of focus offered here.

The present analysis of the syntax of focus differs greatly from previous ones in that there is no syntactic movement driven by focus. The syntax moves constituents independently of their focus properties, and unwanted structures are ruled out at PF. The advantage of this analysis over previous ones is that it accounts for the relevant data by assuming independently motivated properties of focus and prosody, thus providing a simpler and more elegant account of the syntax of focus. Finally, this analysis also makes different predictions about the syntax of Basque which differ from the ones made by previous analyses. Specifically, since the syntactic movements related to focalization are not directly motivated by the focus properties of the sentence, it is predicted that these movements, or at least some of them, could occur without having the specific consequences on focus that have been examined here. This is a very interesting topic which deserves more attention. Since this involves complex questions far beyond the scope of this paper, I will leave this topic for future research.

# 8 Conclusion

In this paper, I have examined several aspects of the syntax, semantics and phonology of finite verbs in Basque. Specifically, I have provided an analysis, based on Laka (1990), in which the difference between simple and compound tenses has to do with head movement. This analysis allows us to provide a simple account of the morphological and semantic properties of these tenses. Furthermore, I have also shown that this analysis has important consequences for other phenomena

which are intimately related to the syntax of verbs in Basque. Particularly, this analysis of the syntax of tense has led me to propose a new account of the syntax of focus in Basque. The main advantage of this analysis over previous ones has been shown to be that it derives the main properties of the syntax of focus from independently motivated properties of the phonology of focused phrases.

Furthermore, there are several aspects of the analysis which suggest that further research into some of these questions is needed. Particularly, as I showed in §5, the distribution of participial suffixes is far more complicated than it might seem at first. In that section, I sketched a preliminary analysis of these suffixes, suggesting that their distribution has to do with morphological properties of verbs. However, a much deeper examination is needed in order to give a complete account. Finally, in §7, I outlined an analysis of focalization in Basque which differs greatly from previous analysis offered in the literature. Although this analysis was shown to have certain advantages over previous ones, I only examined a small part of the focus data if Basque, and I did not discuss certain potentially important differences between this analysis and previous ones. These are all matters which I will leave for future work.

## References

- Albizu, P. (1992) "Where is COMP in Basque?" ms., University of Southern California.
- Costa, J. (1998) *Word Order Variation: A constraint-based approach*, Holland Institute of Generative Linguistics, The Hague.
- Elordieta, G. (1997) "Accent, Tone and Intonation in Lekeitio Basque," in F. Martínez-Gil and A. Morales-Front, eds., *Issues in the Phonology and Morphology of the Major Iberian Languages*, Georgetown University Press, Washington, DC, 3–78.
- Hualde, J. I. (1996) "Accentuation and empty vowels in Ondarroa Basque: Against the concept of phonological derivation," *Lingua* 99, 197–206.
- Hualde, J. I. (1999) "Basque Accentuation," in H. van der Hulst, ed., Word prosodic systems in the languages of Europe, Mouton de Gruyter, 947–993.
- Hualde, J. I., G. Elordieta, and A. Elordieta (1994) *The Basque Dialect of Lekeitio*, Universidad del País Vasco, Bilbao.
- Laka, I. (1990) *Negation in Syntax: On the Nature of Functional Categories and Projections*, Doctoral dissertation, Massachusetts Insitute of Technology.
- Laka, I. (1993) "The Structure of Inflection: A case study in X<sup>0</sup> syntax," in J. I. Hualde and J. Ortiz de Urbina, eds., *Generative Studies in Basque Linguistics*, John Benjamins, Amsterdam, 21–70.
- Laka, I., and J. Uriagereka (1987) "Barriers on Basque WH-Movement," in F. Marshall, A. M. Miller., and Z. sheng Zhan, eds., *Proceedings of the Third Eastern States Conference on Linguistics*, Ohio State University, Columbus, 299–309.
- Neeleman, A., and T. Reinhart (1998) "Scrambling and the PF Interface," in M. Butt and W. Geuder, eds., *The Projection of Arguments: Lexical and Compositional Factors*, Center Study Language and Information, Stanford, 309–353.
- Ortiz de Urbina, J. (1989) Parameters in the Grammar of Basque: A GB Approach to Basque Syntax, Foris, Dordrecht.
- Ortiz de Urbina, J. (1994) "Verb-initial patterns in Basque and Breton," Lingua 94, 125–153.
- Uriagereka, J. (1992) "The Syntax of Movement in Basque," in J. Ortiz de Urbina and J. A. Lakarra, eds., *Syntactic Theory and Basque Syntax*, Universidad del País Vasco, 417–445.
- Uriagereka, J. (1999) "Minimal Restrictions on Basque Movements," *Natural Language and Linguistic Theory* 17:2, 403–444.
- Vallduví, E. (1995) "Structural Properties of Information Packaging in Catalan," in K. E. Kiss, ed., *Discourse Configurational Languages*, Oxford University Press, New York, 122–152.