

LEVIN'S VERB CLASSES AND BASQUE. A COMPARATIVE APPROACH

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Abstract

The assumption that the verb meaning is a key to verb behavior is generally accepted in Linguistics. Thus, the classification Levin proposed in her book "English Verb classes and alternations" is presented as a starting point to analyze other languages and study the possibility of reaching a general classification for verbs in the language. This is what this work taking Basque as the comparing language aims. However, it is a partial analysis since not all classes have been taken into account. Therefore, it has to be considered just as a preliminary approach.

I will present the work in three general sections: In the first one, I will make a general description of Basque and I will present some complexities that it exhibits at the level of syntax. In the second section, I will make a general comparison between the differences that we find in Basque when translating and analyzing the English verbs, and after this, I will focus in a smaller set. Finally, I present some conclusions and possible future lines of work.

1- Brief description of Basque. Some syntactic complexities

Basque is an **agglutinative** language, that is, in order to form words, the dictionary entry independently takes the elements necessary for the different functions, syntactic case included:

e.g. "Semearen etxean" ('in the house of the son')

seme	a	r	En	etxe	a	n
Noun	Determiner (sing.)	Ephentetical element	Genitive case	Noun	Determiner (sing.)	Inessive case
'son'	'the'		'of'	'house'	'the'	'in'

For instance, in the prepositional phrase "semearen etxean" ('in the house of the son'), first we have the noun complement "semearen" which is formed by the noun "seme" ('son'), the singular determiner -a- ('the'), an ephentetical element that is needed when two vowels join together, and the genitive case "-en" ('of'). Then we have the

prepositional phrase "etxean" ('in the house') where "etxe" is a noun ('house'), -a- again the singular determiner and the -n, is the inessive case ('in').

As for the verb, it is split up into two components: The verb itself and the auxiliary. The meaning and aspectual information is encoded in the verb, while tense (present and past) and the mood are encoded in the auxiliary. Moreover, the auxiliary can exhibit up to three agreement morphemes corresponding to the absolutive, dative and ergative cases.

e.g. ekarri ditut ->'I have brought them'

ekar	I	d	it	u	t
Root	Perfective form of the participle	Present tense mark	3 rd person plural absolutive	Root of the indicative mood	1 st person singular ergative

For instance, in the example "ekarri ditut" ('I have brought them') we have the first component "ekarri" where "ekar" is the root of the verb "ekarri" ('to bring') and the -i mark for the perfective participle form. On the other hand, the auxiliary "ditut" is formed by the d- present tense marker, the -it- absolutive marker for the 3rd person plural, -u-, the root of the indicative mood auxiliary, and finally the -t ergative marker for the 1st person singular.

This example shows the agglutinative nature of the language.

Certain verbs have the so-called synthetic form. They are special forms composed of one single word. They have no aspectual mark.

e.g. "nator" ('I come')

N-	-A-	-TOR
1 st person singular	present tense	Root of the verb "etorri"

For instance, the synthetic verb "nator" is composed by the root of the "etorri" verb ('to come') -tor-, the n- absolutive marker for the 1st person singular and the -a- mark for the present tense.

There are four possible ways of combining the three case markers, that is, we have four types of auxiliaries:

Auxiliary types

- 1-Absolutive
- 2-Absolutive-dative
- 3-Absolutive-ergative
- 4-Absolutive-dative-ergative

Since the auxiliary system offers this information about cases, the lexical phrases corresponding to the absolutive, dative and ergative cases must not necessarily be phonetically realized (unless they are focalized). It is the known pro-drop phenomenon. If we take the verb mentioned above, we see that the same sentence in English can be expressed in Basque with multiple choice of omissions:

e.g: English: I have brought them

Basque: [Nik] [haiek] ekarri ditut (subject, object, verb)
 [Nik] ekarri ditut (subject, verb)
 [Haiek] ekarri ditut (object, verb)
 Ekarri ditut (verb)

• However, this syntactic feature does not always imply that all the cases represented in the auxiliary verb can be phonetically realized. Sometimes it is because of the incorporation phenomenon, such as in the case of the verb “deitu” (‘to call’).

AmaK aitarI deitu DIO (‘My mother called my father’)
 erg dat abs-dat-erg

For instance, in the sentence “Amak aitari deitu dio” (‘My mother called my father’) we have the auxiliary with three case markers, but only two arguments can be phonologically realized, since the “deitu” verb is supposed to be composed of the “dei” noun (‘call’) and the “egin” (‘to make’) verb, which literally means ‘to make a call’. Other times, it seems that the object of the verb takes the dative form for its realization. This is the case of the “eutsi” verb.

[AitorreK] [bere ideiarI] eutsi DIO [Aitor] has maintained [(‘to’) his idea]
 erg dat abs-dat-erg

For instance, in the sentence “Aitorrek bere ideari eutsi dio” (‘Aitor has maintained his idea’) the dative case phrase is the object of the verb.

• In other cases, it is difficult to conclude whether a structure exhibits an instance of omission or it is of a relevant alternation for a given verb. For instance, according to Levin,

the English verb “eat” participates in the unspecified object alternation, but in Basque it is not that clear:

(a) “jan” (‘eat’)

English	Basque
Cynthia ate the peach	Cynthiak melokotoia jan zuen
Cynthia ate	Cynthiak (?) jan zuen
□	□
Unspecified object alternation (implicit object)	alternation or omission?

Other times, the variant with the object does not have the same meaning as the one without the object, and therefore, it seems to be more than a simple case of omission. When we say “Jonek entzuten du” (‘John hears’), we first understand that John has the faculty of hearing, while we say “Jonek irratia entzuten du” we understand that “John usually listens to the radio”. Is this an alternation for this verb in Basque?

Basque	English
Jonek entzuten du	John hears
Jonek irratia entzuten du	John listens to the radio

We see that applying the same procedure to Basque, in English correspond to two different words. So, how can we determine what is a case of alternancy?

• Another question that the auxiliary system raises is the one concerning the arguments. The auxiliary system does not seem to guarantee all information about the arguments of a verb in the sense that some verbs, such as the “Putting verbs”, require a prepositional phrase to indicate the goal of the action; and this prepositional complement has no mark in the auxiliary verb. Actually this is a question still discussed in Linguistics yet it seems to be an element that is argument like.

Going back to Basque, other remarkable characteristic is that it is **basically a free word order language** in the sense that the order of the phrases does not define the functions of the arguments. However, when a certain element is focalized it must be put just before the verb. This feature means that alternations based on the change of position of a phrase are not going to be conclusive when determining verb classes. That is the case of the “benefactive”, “dative” and “locative inversion” alternations.

2- Comparison of Levin's verb classes with Basque

2.1 General comparison: Main differences

• If we take the first part of Levin's book concerning alternations, we can see that many of them do not exist in Basque. Here is the list of the existent and non-existent alternation in Basque.

NON EXISTENT ALTERNATIONS	EXISTENT ALTERNATIONS
<ul style="list-style-type: none"> -Induced action alternation -Other Instances of Causative Alternation -Substitution Source Alternation -Understood Body-Part alternation -Understood Reflexive object alternation -PRO-arb Alternation (?) -Way object alternation -Instructional Imperative (?) -Conative alternation -Dative alternation -Benefactive alternation -Locative alternations -All creation and Transformation alternations -“together” reciprocal alternation (transitive and intransitive) (?) -“Apart” reciprocal alternation (transitive and intransitive) -Fulfilling Alternation -Image Impression alternation -With / Against alternation -Through / With alternation -“Blame” alternation -“Search” alternation -Body-Part Possessor Ascension Alternation -As alternation -Time subject alternation (?) -Instrument subject alternation -Location subject alternation -Locatum subject alternation -Container Subject alternation -Raw Material Subject alternation -Sum of Money alternation -Source Subject Alternation -Reflexive diathesis alternations -Verbal passive alternation -Verbal Passive -Prepositional Passive -Adjectival Passive -Alternations involving Postverbal “Subjects” -Reaction object construction -Resultative construction -X's way construction -Obligatory Reflexive Object -Inalienably Possessed Body-Part Object -Expletive It Object -Obligatory Passive 	<ul style="list-style-type: none"> -Middle alternation -Causative / Inchoative alternation -Unspecified Object Alternation -Understood Reciprocal Object Alternation -Characteristic Property Alternations -Preposition Drop alternations -Simple Reciprocal Alternation (Transitive and Intransitive) -Possessor-Attribute Factoring Alternations -Natural subject alternation -Abstract cause subject alternation -Cognate Object Construction -Cognate Prepositional Phrase Construction -Unidirectional Interpretation Object alternations -Bound nonreflexive anaphor as prepositional object -Directional phrases with Nondirected Motion Verbs -Obligatory Adverb -Obligatory negative Polarity Element (?)

It is obvious that the resulting verb classes in Basque are not going to be the same as in English or at least other structure are going to be decisive for the division of some classes (if it is any).

For instance, we can see that the conative alternation is between the non-alternation ones in Basque, which means that, unlike in English, this alternation is not going to be conclusive to distinguish verbs like “hit” and “cut” from “break”. The same occurs with the “give” and “contribute” verbs classes, which in English are distinguished for the different behavior of the dative alternation.

If we have a look at the existent alternations that match in both languages, we see that some of them provide us with more direct information about subcategorization frame of verbs than others. For instance, those that affect transitivity will be more relevant for my purposes than others such as “oblique” subject alternations (e.g. “I dried the clothes in the sun / The sun dried the clothes”). The latter are focused in the nature of the subject, and their alternations are based on elements that function as adjuncts of the verbs. So, when dividing verb classes in terms of subcategorization frames these alternations are going to be quiet irrelevant.

- Another characteristic that is presented as different in Basque and English, is the difference in the incorporation of meaning components. Although in Basque the formation of verbs by incorporation is also productive, there are a lot of English verbs that need to be paraphrased by more than one word in Basque and therefore are not a verbal lexeme but an independent entity from the verb. These are mostly the ones that have a manner or an instrument meaning incorporated, such us many of verbs into the funnel verbs, wipe verbs, spray/load verbs, drive verbs, poison verbs, verbs of instrument of communication, between others. As a consequence, it is not going to be clear how to compare such verbs in both languages and if it possible to do it.

e.g.:

ladle (funnel verb): burduntzaliaz zerbitu -> ‘to serve with a ladle’
swap (manner subclass of wipe verbs): zatarrak garbitu -> ‘to clean by a swap’
cram (spray/load verb): gainezka bete -> ‘to fill completely’
truck (drive verb): Kamioz eramán -> ‘to take by truck’
email (Verbs of instrument of communication): posta elektronikoz bidali: ‘to send by e-mail’

All these differences between the two languages with respect to alternations lead me to propose a more general classification leaving the differences aside and pointing out the similarities between them.

2.2 Comparison based in a set of verbs

I haven’t analyzed all classes in the book due to the limitation of time. I have limited to a set that you are working with for Chinese and Spanish. However, I have to mention that I have left apart some classes because the verbs belonging to them form a quite heterogeneous group after being translated from English to Basque. This is the case of Verbs of Calibratable Change of State, Disassemble Verbs and Verbs of Image Creation. So the analyzed set is formed by the following classes:

9.1 Put Verbs
9.10 Pocket Verbs
10.1 Remove Verbs
10.2 Banish Verbs
10.5 Verbs of Possessional Deprivation
11.1 Send verbs
11.3 Bring and take verbs
13.1 Give verbs
13.3 Verbs of future having
13.4.2 Equip verbs
13.5.1 Get verbs
13.5.2 Obtain verbs
22.1 Mix verbs
22.2 Amalgamate verbs
25.4 Transcribe verbs
26.1 Build verbs
26.4 Create verbs
26.7 Performance verbs
27 Engender verbs
29.3 Dub verbs
29.4 Declare verbs
37.1 Verbs of transfer a message
42 Verbs of killing
45.4 Other alternating verbs of change of state
47.1 Exist verbs
47.7 Meander verbs
48.1 Verbs of appearance
48.2 Verbs of disappearance
51.1 Verbs of Inherently Directed Motion
51.3.2 Run verbs
55.1 Begin verbs
55.2 Complete verbs

Next I am going to try to propose a general classification focusing in the communalities found between the two languages.

•Some of the classes show a locative case component as a complement of the verbs, such us:

- Put verbs
- Pocket verbs
- Remove verbs
- Banish verbs
- Verbs of Possessional Deprivation: Steal verbs
- Send verbs
- Bring and Take verbs
- Verbs of Inherently directed motion

They differ among each other, both in English and in Basque, in allowing a certain locative preposition to realize the goal and the source:

	English	Basque
Put verbs	on/under/near	-n/ gainean/azpian (inessive cases)
Pocket verbs		-n/-ra (inessive or adlative cases)
Remove verbs	from/from under...	-tik/azpitik/ gaintetik (ablative cases)
Banish verbs	from/to	-tik/-ra (ablative or adlative cases)
Verbs of Possessional Deprivation	from	-tik (ablative case)
Send verbs	from/to	-tik/-ra (ablative or adlative cases)
Bring and Take verbs	from/to	-tik/-ra (ablative or adlative cases)
Verbs of Inherently Directed action	from	-tik/-ra (ablative or adlative cases)

The presence of this locative element indicates that all of them represent a motion of an entity. When the verb is transitive, the motion falls on the object and when the verb is intransitive the motion falls on the subject.

Sometimes, the goal can be animate entities in both languages and in this case in Basque the adlative case shows an alternation with the dative case.

English Nora brought the book [to the meeting]	Nora brought the book [to Pamela]
Basque Norak liburua [bileraRA] ekarri zuen	Norak [PamelarI] liburua ekarri zion
adlat	dat

• Another set of verbs shows as their main characteristic the presence of a dative case argument as the goal of the action, such us:

- “give” and “contribute” verbs
- Verbs of future having
- Equip verbs
- Verbs of transfer a message

In these verbs the dative complement indicates the new possessor of the object that has been moved by an agent. So, this means that there is an action of change of possession.

However, in the cases of the “Verbs of transfer a message” there is an alternation that differs clearly from the other classes in this set. The object can be realized as a noun phrase or as a sentential complement. And in fact, when the object is realized as a noun phrase, it often presents an abstract notion. That is, in the case of the “Verbs of transfer a message” the object that is transferred is an abstract concept while in the other cases the object is concret. This happens in both languages. Therefore, it does not strike to me implausible to assume that verbs of transfer a message form a separate class.

If we pay attention to the “Equip verbs” we see that in Basque they are usually translated as a noun + a “give” or “contribute” verb. For instance:

Charge: ardua eman -> ‘to give the charge’
 Compensate: kalteak ordaindu -> ‘to pay the damage’

So, they fuse with the “give” and “contribute” group.

• When translating “Run” verbs into Basque the result is that most of them are unergative verbs, and others have to be paraphrased. Unergatives in Basque show a transitive auxiliary and an single ergative complement as the subject of the action. Here are some examples:

To run: [Nik] [korritu dut]
 To run: [Nik] [lasterka egin dut]
 To jog: [Nik] [footing egin dut]
 To swim: [Nik] [igeri egin dut]

On the other hand, the paraphrases are composed of a complement that, nontrivially describe an activity plus the verb “ibili” (‘to move/walk’)

Igerian ibili: ‘to swim’
 Korrika ibili: ‘to run’
 Oinez ibili: ‘to walk’

Moreover, they seem to have in common the possibility of taking complement expressing the temporal period in which the action happens. This complement is realized in Basque by means of the instrumental case -z (‘for’ in English).

The possibility of accepting this temporal complement characterizes these verbs as a continuous durative activity verbs.

• There is another set of verbs that in their basic use show two components that are realized as the agent and the theme, such as:

- “get” and “obtain” verbs
- Transcribe verbs
- Built verbs
- Create verbs
- Performance verbs
- Engender verbs
- Murder Verbs
- Other alternating verbs of change of state

However, there is a clear difference that divides all the set into two groups. The “other alternating verbs of change of state” show the causative/inchoative alternation in both languages. The rest of the classes do not. This alternation, as it is known, is namely the one that indicates a change of state of an entity without creating a new one. The cases that do not show this alternation imply a creation or an elimination of the object. So after the process of the verb is carried out, a new entity comes into existence or an entity is eliminated.

e.g. “dry” vs. “fix” in the Causative/Inchoative alternation:

English	Basque
[Bill] <u>dried</u> [the clothes]	[Billek] [arropa] lehortu ZUEN (transitive auxiliary)
[The clothes] <u>dried</u>	[Arropa] <u>lehortu</u> ZEN (intransitive auxiliary)
[Donna] <u>fixed</u> [a sandwich]	[Donnak] [otartekoa] <u>prestatu</u> ZUEN
*[A sandwich] <u>fixed</u>	*[Otartekoa] <u>prestatu</u> ZEN

(The inchoative variant is expressed in Basque by changing the transitive auxiliary to the intransitive one)

However, not all verbs of change of state show the same tendency to participate in the causative / inchoative alternation in Basque. Verbs such as zahartu (‘age’) and hazi (grow), are more commonly found in the inchoative variant.

• Another set of classes shows only an intransitive use:

- The exist verbs
- Appear verbs
- Dessappearance verbs
- Meander verbs

The “exist”, “appear” and “dessappearance” verbs allow a locative or temporal complement and they can be realized both by the inessive (-n=‘in’) or ablative

(-tik=from) cases. This complements represent the spatial or temporal coordinates of the existence of an entity.

As for “meander” verbs, like in English, in Basque the set is restricted to describe the location of a long continuous object. This restricted feature is represented in Basque by a paraphrased structure, formed by an ablative case (-tik=from), an adlative case (-ra=to) and the “joan” verb (‘to go’) in the non-aspectual synthetic form:

e.g. Ibaia lakutik itsasora doa (‘The river runs from the lake to the sea’)

[IbaiA]	[lakuTIK]	[itsasoRA]	doa
	abs	ablat	adlt

This is a construction that, in my opinion, has to be considered more as a fixed lexicalized structure rather than a regular one.

The rest of the classes seem to be harder to be grouped.

• The *mix* and the *amalgamate* verbs show as the main feature the presence of a commitative case complement: -ekin (‘with’). Like in English, they participate in the Simple reciprocal alternation and when they don’t take a prepositional complement they need a collective NP as the object when they are transitive or a collective subject when intransitive.

e.g. “Hermanek arraultzak esnegainarekin nahastu ditu” (‘Herman mixed eggs with cream’)

Basque	[HermaneK]	[arraultzAK]	[esnegainarEKIN]	nahastu zituen
English	[Herman]	[eggs]	[with cream]	mixed

Basque	[HermaneK]	[arraultzAK]	nahastu zituen
English	[Herman]	[eggs]	mixed

In Basque the “Together reciprocal alternation” does not take place because the concept of get together seems to be inside the verb. So apparently the mix and amalgamate verbs form an only class in Basque.

• If we take the “Dub” and “Declare” verbs, as Levin points out, the hallmark of them is that they show a predicate complement in their structure. It is said that in Basque this predicate complement takes an indefinite absolutive case to be realized; however the nature of this case is still a discussed question in Basque.

Basque	[LehendakariaK]	[Smith]	[prentsa-idazkari]	izendatu du
	erg	abs	abs (indef)	
English	[The president]	[Smith]	[press secretary]	mixed

These verbs describe the assignation of a new property to an entity: a name, a social status...

• Finally, we have the *begin* and *complete* aspectual verbs. As Levin mentions in her book, these verbs describe the initiation, termination and continuation of an entity. Like in English, they show an alternation between a noun complement and a prepositional complement. In Basque the prepositional complement is always realized in the gerundive form. -tzen (-ing).

So, the general classes that I have established for the verbs treated here are the following:

- Verbs of change of position
- Verbs of change of possession
- Verbs of transfer a message
- Activity verbs
- Verbs of change of state
- Verbs of creation and elimination
- Verbs of existence
- Join verbs
- Verbs of assigning properties
- Aspectual verbs

3- Conclusions and possible future lines of work

• This classification has been based in just a set of classes, but it is supposed that when analyzing the rest of the classes other common alternations will also be shared by both languages and imply similar classes. However, the study of the relevant alternations relating specifically to Basque is still subject to further investigation.

• On the other hand, the presented classification needs to be supported by a corpus based analysis, since as it is known, the corpus resources offer sometimes data that otherwise we may not take into account. Although in the classification proposed we have assume a main structure for each class, it is not always so clear. Actually, we are nowadays working on a partial syntactic analyzer, which detects the phrases found around a verb. This analyzer is able to provide us with statistical results in terms of frequency of cases appeared around the verb. We get results either respecting to the combination of cases or the cases individually. Thus, it is a tool for checking the data as well as source of new ones.

- Finally, it will be very interesting to study the incorporation phenomenon in Basque: Analyze how it affects syntactically and if it is possible to reach any regularity.