

Article

From Colombo to Athens: Areal and Universalist Perspectives on Bilingual Compound Verbs

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Abstract: Most or all bilingual varieties of the languages spoken in the area between Sri Lanka and Greece have bilingual compound verbs, consisting of a lexical content verb from a donor language and a helping verb from the matrix language. In this paper, these verbs are described and analyzed, and the question is raised whether this widespread occurrence is specifically an *areal* feature, or a universally available pattern and a question of typological poise—the possibility of a construction arising due to propitious typological circumstances. Pleading for the areal perspective, it is concluded there is the fact that two large and important language families—Turkic and Indo-Iranian—either rapidly developed or already had a productive [noun + verb] construction. On the universalist side, it is clear that native [noun + verb] constructions very easily develop into [verb + verb] constructions in bilingual settings, though not in monolingual settings. This is a cross-generational change that is a contact phenomenon; that is to say, this development does not occur in monolingual, non-contact language settings.

Keywords: bilingual compound verb; Turkic; Indo-Iranian; language contact; typology; linguistic areas

1. Introduction

This paper is about the distribution of a specific linguistic feature, the bilingual [verb + verb] compound verb (BCV). The feature in question does not show up in the native monolingual varieties under consideration, which only have [noun + verb] compound verbs, but exclusively in the results from the interaction of the native monolingual varieties with other languages in a *contact* situation (for a similar analysis, see also Bhatia and Ritchie [1,2]).

Furthermore, the feature is present in a series of geographically contiguous languages, many of which have had long-standing interactions in the course of their development. Roughly, it appears in the languages in the geographical area between Colombo, Sri Lanka, and Athens, Greece. It is thus an *areal* feature as well, and a feature of an extended area, at that. However, it is not limited to the linguistic area in question and occurs elsewhere as well, although it is certainly characteristic of this particular linguistic area.

The distribution of BCVs could be explained in different ways, which may not exclude, but actually complement each other. First, it could be that we have something here that we may want to term an *areal contact feature*: a linguistic pattern that can only be defined in terms of the contact between two languages, but at the same time shows considerable areal spread. The combination of these features—limited to contact settings and with considerable areal spread—would tend to show how important bilingualism is as a historical phenomenon in a large area. This long-standing bilingualism would make it possible that contact features, patterns characteristic of bilingual settings only, actually spread from one language to the next.

A second possible explanation is in terms of *universals*: the feature in question then would be simply an option present in universal grammar that is realized under specific circumstances, when particular structural conditions are met. This option may be termed *typological poise* [3], *i.e.*, a shared universal structural propensity to develop a certain pattern, in this case bilingual compound verbs, in situations of language contact, due to another shared areal feature which may have resulted from earlier linguistic diffusion, namely [noun + verb] compound verbs in the native monolingual varieties. Enfield [3] (p. 5) defines typological poise as “the overall structural profile of a linguistic system, which can serve to promote or inhibit a given course of evolution”, and [3] (p. 353) “the notion that possible or likely developments in a language depend on, or emerge from, existing grammatical/typological structure, making typologically similar languages more likely to independently follow similar paths of development.” The explanation in terms of typological poise can be phrased in more formal (e.g., generative) terms or in more functional terms.

I will begin by outlining what BCVs are (Section 2). Then, in Section 3, I turn to their distribution in the languages spoken from Colombo (Sri Lanka) to Athens (Greece). Section 4 is devoted to possible universalist explanations for the feature in question in terms of typological poise, and Section 5 to possible historical sources for the areal spread. I conclude in Section 6.

2. Bilingual Compound Verbs (BCVs)

The pattern involved is illustrated in the Turkish/Dutch bilingual sentence in (1). The italicized words are embedded into the Turkish matrix language from Dutch. The bold element is the helping verb:

1. Türk-ler also, [klant-lar] [wegjagen] **yap**-ıyor
 Turk-PL taking, customer-PL chase-away do-PR.3SG
 ‘If he were to take Turks, he chases away customers.’ (Turkish/Dutch) [4]

Here a grammaticalized Turkish native helping verb, typically *yap*- ‘do’ (presented in bold in example (1) and the examples to follow) is freely combined with an imported Dutch verb, here *wegjagen* ‘chase’ (presented in italic in (1) and in the examples to follow). The resulting verb is transitive, and the object is inflected in Turkish (even while containing a Dutch root *klant* ‘customer’). The bracketing indicates that the two verbs form a unit, while the Dutch verb and the Dutch noun do not.

The pattern in (1) is productive in the speech of Turkish/Dutch [4,5], Turkish/German [6], and Turkish/Norwegian [7,8] bilinguals, and it mostly occurs with verbs, although nouns and other elements may occur occasionally as well. In the native monolingual variety, monolingual Turkish itself, the [verb + verb] pattern does not occur. Instead, we have a native [noun + verb] pattern. More generally, we can say that the native pattern in (2a) is replaced, in the bilingual setting, with the pattern in (2b):

2. a. **native:** [love_{noun} do] ‘to perform love’
 =>
 b. **bilingual:** [love_{verb} [do]] ‘to do something (namely loving)’

In Muysken [9,10], it is argued that the shift from the native to the bilingual pattern also involves a shift from a complementation to an adjunction structure. The pattern in (2) involves an inseparable lexical compound rather than a separable [auxiliary + infinitive] structure (see also Section 3). Crucial in the analysis in [9] is the shift from nominal to verbal features in the first element in the compound. Muysken [10] argues that the [v + v] pattern does not occur in monolingual, native varieties, only in bilingual varieties, and hence is inevitably a product of non-child acquisition.

It should be immediately clear that there are many cases of monolingual [v + v] constructions in the languages of the world (a convenient short overview of some of the relevant constructions is found in [11]). A familiar example is the French *faire* construction:

3. Jean l’a fait partir.
 John 3SG.PRO=have.3SG make.PP leave
 ‘John has made her/him leave.’ [12] (p. 25)

As argued by Rosen [12] and others, the fact that the object clitic (the interpreted subject of the verb ‘leave’) appears on the higher auxiliary is an argument for the fact that *a fait partir* ‘has made leave’ functions as a unit here. Crucially, however, (3) does not mean: ‘John left her/him’. In the monolingual varieties, the ‘do’-verb has a causative interpretation.

Chatterjee [13] likewise reports on monolingual verbal complexes in Bengali, as in (4):

4. ami boi gulo guc^hi-e Di-ec^hil-am
 3SG book PL arrange-PFV.PP give-PST.PFV-1SG
 ‘I have arranged the books (completely for someone else.)’ [13] (p. 51)

The verb carrying person marking here is termed the vector verb, and it affects the aktionsart of the lexical verb in various ways. Typical vector verbs are ‘go’, ‘come’, ‘throw’, ‘sit’, ‘give’ and ‘take’. Crucially, the equivalent of the verb ‘do’ cannot be used in this construction. From what I understand of the literature, this pretty much reflects the general picture for the Indo-Iranian languages, which have a lot of these [v + v] structures.

However, even though it is not the focus of the present paper, some discussion is called for regarding the status of the “helping verb” from the matrix language in the grammaticalized BCV [v + v] category. Even though the grammaticalization it has undergone has led to its being completely or partially “bleached” of its content, as a “dummy” verb, there is still an agentivity or intentionality distinction in some languages.¹ Another property to be considered is the separability between the two elements in the construction. On the whole, they form a tight unit, but this is not always the case in the [v + v] construction.² A third important question is the grammatical status of the content verb from the donor language. This verb does not have the status of the native verb in the monolingual variety. That is, the bilingual content verb cannot take the verbal inflections found on its monolingual counterpart. Does the imported verb partially or completely lose its status as verb in the bilingual compound verb construction in the matrix language?³ It is clear from the range of elements that can occur with the helping verb can vary, with verbs being the most productive category (see, e.g., the discussion of Sarnami Hindustani below), but with other elements as well in this position. Please recall

¹ One reviewer points out that in the Indo-Aryan language Marathi, both ‘do’ and ‘be/happen’ can occur in English–Marathi BCVs (v + v). While *appreciate kar-Ne* ‘appreciate do’ conveys an intentional act, *appreciate -hoNe* ‘appreciate happen’ expresses a non-intentional act.

² One reviewer points out that in Marathi, the bilingual compound is different from the monolingual v + v compound. The monolingual counterpart does not allow separation of the two verbs while the bilingual compound does. For example, (ii) is not grammatical when *sagLa* ‘entire’ intervenes between the verbs while it is possible to insert *khuup* ‘a lot’ in the bilingual verb in (iii). The native Marathi construction is given in (i).

- | | | | | |
|-------|-----------------------------------|--------------------------|------------------|---------------------|
| (i) | tyaa-ne
he-REG | pustak
book | vaachuun
read | ghet-la
take-PST |
| | ‘He read the book (for himself).’ | | | |
| (ii) | * tyaa-ne
he-REG | pustak
book | vaachuun
read | sagLa
entire |
| | ‘He read the entire book.’ | | | |
| (iii) | tyaa-ne
he-REG | appreciate
appreciate | khuup
a lot | ke-la
do-PST |
| | ‘He appreciated it very much.’ | | | |

Although pre-verbal placement of *khuup* (*tyaane khuup appreciate kela*) is preferred, its occurrence between the two verbs is not ruled out. Thus it is not clear, whether the bilingual compound verb is as inseparable as its monolingual counterpart. However, this separability is not possible in all languages concerned.

³ One reviewer points out that in the bilingual Marathi construction, the English phrase ‘take care’ is not perceived as a verb but rather as the complement of the verb ‘do’. For me, the word ‘complement’ is not the right term, but for the rest I share this intuition:

- | | | | | | |
|----------|--|--------------------------|------------------------|-----------------------|------------------------|
| mii
I | tyaa-laa
he-DAT | (aaiichii)
(mother’s) | take care
take care | karaaya-laa
do-DAT | saangit-la
tell-PST |
| | ‘I told him to take care (of mother).’ | | | | |

that I am assuming that the content element is not a complement proper, but an explicative adjunct: ‘to do something, namely X/to be in state of something, namely X.’

Altogether, and this is a question which would require an entire monograph to be treated adequately, is the issue of the structural similarity or difference of the BCVs in the languages under study. The helping verb ‘do’ occurs in all of the languages, but does it always have a similar function? Is there one helping verb or are there more? Can the two verbs be separated? What is the categorical status of the content element in the BCV?

3. From Colombo to Athens

In this main section, I will briefly present evidence, building on the presentation in [9], from a number of contiguous languages and language families for the areal feature that I am arguing for in this paper. In all the native monolingual varieties, there are [noun + verb] combinations, while in the contact varieties of these same languages we find [verb + verb] combinations. We will start with Tamil and slowly move towards Greek.

3.1. Tamil

In Tamil, three verbs are used in [noun + verb] combinations to incorporate English vocabulary [14]: *po:Du* ‘put’, *aDi* ‘strike’, and *paNNu* ‘do’. One of these is used productively with English verbs: *paNNu* ‘do’. An example is given in (5):

- | | | | | | | |
|----|--|----------------|---------|------------------|--------------|---------------|
| 5. | oru | aambiLLainaaka | [konjam | discretion] [use | paNNuvaan] | |
| | one | man. if | some | discretion use | do.FUT.3SG.M | |
| | ‘If he be a man, he will use some discretion.’ | | | | | [15], (p. 80) |

Shanmugan Pillai [14] has carried out a careful study of the English elements used this way in “educated” varieties of Tamil. A summary of his results for the substantial Tamil corpus he collected in the 1960s is given in (6). With native elements, *paNNu* is limited to nouns, as in (6a). It was only found in combination with one English element unambiguously analyzable as a noun, (6b), and three English adjectives and prepositions or particles, (6c) and (6d). The large majority of English words combined with *paNNu*, 194, were elements plausibly or forcibly analyzed as verbs (6e–g).

- | | | | | | |
|----|----|----------------|--------------------------|--------------------|-----|
| 6. | a. | ke:li paNNu | ‘make fun’ | N ^{Tamil} | |
| | | nagE paNNu | ‘make earrings’ | | |
| | b. | idea paNNu | ‘give an idea’ | N | 1 |
| | c. | nice paNNu | ‘do something to please’ | A | 3 |
| | | strict paNNu | ‘make things strict’ | | |
| | | tight paNNu | ‘make tight’ | | |
| | d. | in paNNu | ‘tuck a shirt in’ | P | 3 |
| | | off paNNu | ‘switch off’ | | |
| | | on paNNu | ‘switch on’ | | |
| | e. | overtake paNNu | ‘overtake’ | V | 60 |
| | f. | watch paNNu | ‘keep a watch’ | VN | 115 |
| | | fight paNNu | ‘fight’ | | |
| | g. | waste paNNu | ‘waste’ | VNA | 19 |

Annamalai [16,17] provides a developmental perspective on this construction, noting that imbalanced bilinguals prefer the construction with English nouns, (7a) and (8a), while balanced bilinguals prefer verbs, (7b) and (8b).

- | | | | | | | |
|----|----|-------------------|------|-----------|-----------|--------------|
| 7. | a. | avan | enne | confusion | paNNiTaan | (imbalanced) |
| | b. | avan | enne | confuse | paNNiTaan | (balanced) |
| | | he | me | | did | |
| | | ‘He confused me.’ | | | | |

8. a. onakku oru eDam reservation **paNNirukeen** (imbalanced)
 b. onakku oru eDam reserve **paNNirukeen** (balanced)
 I one have done
 'I have reserved a place for you.'

A reviewer points out that, in contemporary Tamil, the verb *aDi* occurs as a lexical verb and when used as a light verb or verbalizer it can also combine (in monolingual Tamil) with a verb:

9. vereTTu = drive out
 vereTTi aDi = drive out (here the speaker's attitude (disapproval) is indicated)

The verb *aDi* can also be used as a verbalizer in BCVs, as in:

10. copy aDi
 bore aDi

with the equivalent BCVs *copy paNNu* and *bore paNNu*, the meaning is unmarked and non-pejorative. The distribution of *paNNu* and *aDi* constructions requires further investigation.

3.2. Indo-Aryan Varieties

3.2.1. Panjabi and Hindi

There is an extensive literature on BCVs in Indo-Aryan varieties, as discussed, e.g., in Romaine [18]. In the data reported, stemming from Panjabi/English [18] (p. 133) migrants in urban England, two verbs occur: *hona* 'be' and *karna* 'do'.⁴ Again, the most productive bilingual patterns involve an English verb. There are no cases involving simply a noun.

11.	MIXED COMPOUND	STRUCTURE	NUMBER
	<i>involve hona</i>	verb hona	12
	<i>cut off hona</i>	verb + particle hona	3
	<i>guilt feel hona</i>	noun + verb hona	?2
	<i>appreciate karna</i>	verb karna	50
	<i>pick up karna</i>	verb + particle karna	5
	<i>exam pass karna</i>	noun + verb karna	4
	<i>lobbying karna</i>	gerund karna	1

The Panjabi data reported on by Romaine [18] are quite similar to data gathered by Kishna [19] among speakers of Sarnami (Surinam) Hindi living in the Netherlands. In this dataset, the number of verbs involved is slightly larger, however.

12.	MIXED COMPOUND	GLOSS DUTCH STEM	MEANING
	<i>uit ja:</i>	'out'	'go out'
	<i>over a:ve</i>	'over'	'come over', 'immigrate'
	<i>tegen rahe</i>	'against'	'be against'
	<i>luk ho:ve</i>	'succeed'	'succeed'
	<i>geboren bhaili</i>	'born'	'I am born'
	<i>schoon-maak kare</i>	'clean make'	'clean'
	<i>propaganda kare</i>	'propaganda'	'make propaganda'
	<i>koffer pak kare</i>	'suitcase pack'	'pack a suitcase'

Nonetheless, here the most productive pattern by far involves the verb *kare* 'do'. In (13), the frequency is given for the different categories of Dutch elements:

⁴ One reviewer points out that in Marathi, both 'do' and 'be/happen' can occur in English–Marathi BCVs (v+v). While *appreciate kar-Ne* 'appreciate do' conveys an intentional act, *appreciate-hoNe* 'appreciate happen' expresses a non-intentional act.

13. Dutch elements that combine with *kare* in Sarnami Hindi
- 12 Dutch nouns
 - 5 Dutch adjectives
 - 13 Dutch adpositions
 - 100 Dutch verbs

Again, verbs are by far the most productive category. It is fair to say the construction has grammaticalized with verbs.

3.2.2. Bengali

Chatterjee [13] reports on Bengali–English BCVs. Interestingly, in Bengali, BCVs may contain three parts: an English lexical verb, a Bengali helping verb ‘do’ or ‘be’, and a vector verb that adds aspectual and other nuances. In (14a), a simple BCV is shown, and in (14b) a more complex BCV including a vector verb:

14. a. o Sitayon-ra shift kor-ec^h-e
 Oh NAME-PL shift do-PFV-3PL
 ‘Oh Ritayon and folks have shifted.’
- b. o Sitayon-ra shift kor-e gae-c^h-e
 Oh NAME-PL shift do-PFV.PP go-PFV-3PL
 ‘Oh Sitayon and folks have shifted (completely).’

The existence of examples such as (14b) shows the full integration of the BCVs into Bengali grammatical structure.

3.3. Indo-Iranian Varieties

3.3.1. Pashto

Many words in Pakistani Pashto are borrowed from Urdu. Pashto also contains many words borrowed from Arabic. Roberts [20] argues that in Afghanistan Pashto the two elements of the compound verb behave syntactically somewhat independently, since the personal reference clitics may be distributed independently over the two parts of the compound, with specific syntactic effects. Thus, compound verbs in perfective aspect should be analyzed as two units rather than one. Examples given include:

15. a. Mamaad fiker kewi tshi de Sur Gwel day khwaass dey
 Mamaad thought do COMPOSS Sur Gwel him like be
 ‘Mamaad thinks Sur Gwel likes him.’ (Kandahar)
- b. hagheey hagma mayshem tshi uda dee khkol krro
 she DET baby COMPSleep be kiss do
 ‘She kissed the baby while it was sleeping.’

Bilingual [verb + verb] compounds in Pashto are documented in Khan and Muysken [21]. Some examples are:

16. a. che [[da de format] ba sanga [start kaw-o]]
 COMP GEN DM.PRX format CL.FUL how start do.PRS.IPFV-1PL
 ‘... that how we will start this format.’
- b. media [[negative role] hu [play kaw-i]]
 Media negative role indeed play do.PRS.IPFV-3SG
 ‘Media indeed play a negative role.’

Table 1 (taken from [21]) presents the distribution of bilingual complex verbs in the corpus collected by Khan.

Table 1. Distribution of the Embedded Lexical items in the BCV patterns in English-Pashto code mixing.

English	kaw	keg	copula	others
lexical elements	(do/make)	(become)	(be)	<i>ra- zam</i>
Verb	22	9	2	2
Noun	1	1		
Participle			2	
Gerund	1		1	
Verb particle		2		

It is clear that the dominant pattern involves the dominant pattern of [verb + *kaw* 'do'], followed by the combination [verb + *keg* 'become'].

3.3.2. Persian

Dabir-Moghaddam [22] gives the following examples of compound verbs in Persian:

- | | | |
|-----|--|------------------------|
| 17. | <i>delxor</i>
annoyed
'to annoy' | <i>kardan</i>
make |
| 18. | <i>saxt-e</i>
built-PP
'to be built' | <i>sodan</i>
become |
| 19. | <i>tahdid</i>
threat
'to threaten' | <i>kardan</i>
do |

Naseh [23] (p. 105–119) provides extensive examples of Swedish verbs in the speech of Persian/Swedish bilinguals:

- | | | | | | | |
|-----|--------------------------------------|--------------------------|--------------------------|---------------------------------|-------------------|--|
| 20. | <i>mâ</i>
Us | <i>ro xub</i>
RÂ well | <i>behandla</i>
treat | <i>mi-kon-an</i>
IMPF-do-3PL | <i>agar</i>
if | <i>jämföra kon-i</i>
compare do-2SG |
| | 'They treat us well if you compare.' | | | | | |

This strategy is also used to incorporate alien verbs in Iran itself [23] (p. 107):

- | | | | |
|-----|--------|---------------|-------------|
| 21. | cancel | kardan | 'to cancel' |
| | delete | kardan | 'to delete' |
| | edit | kardan | 'to edit' |

3.3.3. Kurdish

The data for Kurdish are relatively scarce. It is clear that the language has a productive native [noun + verb] pattern [24]:

- | | | |
|-----|------------------------|----------------|
| 22. | <i>kurte</i> | 'abbreviation' |
| | <i>kurt-kiridinewe</i> | 'abbreviate' |
| | <i>amojgarî</i> | 'advice' |
| | <i>amojgarî-kirdin</i> | 'advise' |
| | <i>abûrî</i> | 'economy' |
| | <i>abûrî-kirdin</i> | 'economize' |
| | <i>perwerde</i> | 'education' |
| | <i>perwerde-kirdin</i> | 'educate' |

There are two verbs involved: *kirin* 'do', to create transitives and causatives, and *bûn* 'be', to create intransitives, passives, reflexives, and reciprocals [25] (p. 51).

Describing Kurdish/Turkish language contact, Dorleijn writes [25] (p. 49): "In Kurdish the borrowing of Turkish past/perfect participles is, however, the normal way to borrow verbs, although

occasionally the borrowing of verb stems occurs as well.” Briefly, Kurdish/Dutch language contact is mentioned, and an example is given of a complex verbal expression with the verb *kiri*- ‘do’:

23. *met lijn negen gaan kiriye*
with line nine go do-3.PF
‘he took streetcar number nine’

Further research on contact varieties of Kurdish is needed to study the productivity of this phenomenon.

3.4. Arabic

Arabic generally does not have either [verb + noun] combinations natively or [verb + verb] combinations in its contact varieties. Nonetheless, in contact with Persian and Turkish, these did emerge. Arabic in Afghanistan [26] (p. 187) has Persian lexical calques of the following type:

24. sawdaa sawee-na [trade do.PST-1PL] ‘we did trading/we traded’

Kieffer [26] (p. 187) argues that this was ‘... perhaps a pattern originally introduced to accommodate new concepts, and then extended throughout the lexical domain.’

25. *taxsiim-át* *sür-na*
division-PL became-we
‘we were divided’

With respect to the Arabic of Cilicia (Southern Turkey), Procházka [27] (p. 194) remarks that “... the dialects of Cilicia possess a lot of Turkish loan verbs. Some of them are integrated into the Arabic verbal system, others follow the pattern of the phraseological verbs of Turkish and consist therefore of a noun and the verb *sawwa ysawwi* ‘to make’.”

26. *sawwa diqqa:t* ‘to take care’ (<dikkat etmek)
sawwa tabassu:m ‘to smile’ (<tebessüm etmek)

3.5. Turkish

In many contact varieties of Turkish, the native verb *yap*- ‘do’ is combined with an imported verb. In addition to the Norwegian and Dutch cases cited below (see also example (1) above), these include German [6] and Bulgarian [28] (p. 157). In all these cases, the verb *yap*- is quite productive. In contact with Bulgarian, it is combined with a finite third person form of the Bulgarian verb, since this language lacks infinitives.

27. *studer-e* *yap-ma-yl* *isterd-im*
study-INF do-INF-ACC would.like-1SG
‘I would like to study.’ (Turkish/Norwegian) [7]
(p. 100)
28. *Baba-m-a* *[bir smoes]* *[verzinn-en]* *yap-tlk]*, ...
father-1SG-DAT one excuse make.up-INF do-PR.1PL
‘We made up an excuse for my father, ...’ (Turkish/Dutch) [4]

In native Turkish, there are also [noun + verb], though never [verb + verb], combinations, which generally involve the verb *et-mek* rather than *yap-mak*.

3.6. Greek

There are a few sources describing Greek/English language contact. Seaman [29], analyzing Greek in the U.S., argues that two verbs are involved: *jín*- ‘be’, used statively, and active *kán*- ‘do’:

29.	éxi jíni <i>stuck</i> ja na jínune <i>defrost</i>		participle verb/participle?
30.	káno <i>cover up</i> káno <i>delivery work</i> káni <i>cover her body</i> káni <i>measure to power</i> káni <i>explains</i> kánune <i>fishing</i> kánune <i>feast</i> káni <i>shiny</i>	do.1SG do.1SG do.3SG do.3SG do.3SG do.1PL do.1PL do.3SG	verb + particle noun verb phrase verb + mixed noun phrase finite verb verb + ing verb / noun adjective

The element combined with these helping verbs can vary quite a bit, although again it is most productively used with verbs.

Fotiou [30] provides a detailed overview of BCVs in Cypriot Greek, based on a corpus of recordings. In her corpus, the distribution of complements of the *do* verb was as follows:

31.	Total # 65	%
	Verb	41.5
	Noun	29
	Gerund	7.5
	Verb + particle	7.5
	Participle	6
	to + verb	3

According to Joseph and Philippaki-Warbuton [31], there are no [noun + verb] compounds in Modern Greek, and thus it is not clear what the basis is for these BCVs. Furthermore, compounds in Greek are head-final, while the construction in (24) and (25) is head-initial.

3.7. Summary

In Sections 3.1–6 we have seen a contiguous area, ranging from Tamil in the southeastern corner to Greek in the northwestern corner, in which this construction is found. The findings are systematically presented in Table 2.

Table 2. Bilingual Compound Verb (BCV) constructions in the area under consideration.

Language	Native Pattern	Verbs Involved	Remarks
Tamil	N + V	paNN- 'do'	very productive
Indo-Aryan	N + V	kar-na 'do' ho-na 'be'	very productive
Pashto	N + V	kaw 'do' keg 'be'	very productive
Persian	N + V (<i>kærdæn</i> 'do', <i>šodæn</i> 'become', <i>zædæn</i> 'strike' <i>dadæn</i> 'give')	<i>kærdæn</i> 'do'	very productive
Turkish	N + V (<i>et-mek</i> , <i>el-mek</i>)	<i>yap-mak</i> 'do'	very productive
Arabic	-	<i>saw-</i> 'make'	
Kurdish	N + V	<i>kirin-</i> 'do' <i>bûn-</i> 'be'	
Greek	?	<i>kân-</i> 'do' <i>jîn-</i> 'be'	

4. Universality and Typological Poise

The next question to ask oneself is: is the [verb + verb] pattern described in the previous section not a universal one in language contact situations, since it apparently occurs so frequently?

In a comparative study of loan verbs involving 207 languages and 553 language pairs, Wohlgemuth [32] distinguishes four ways of incorporating verbs from another language (see also the typology in [9]):

1. Direct Insertion
2. Indirect Insertion
3. The Light Verb Strategy
4. Paradigm Insertion

Strategy 4 is rare and need not be discussed here further (but see e.g. [33,34]). Strategy 1, Direct Insertion, is relatively frequent: the foreign verb stem is simply treated like a native stem. In many languages without overt inflection, the imported verb may simply be used on its own, such as Chinese, forms of Malay, and Creole languages. Here is an example of a Dutch verb in Sranan, cited from Bolle [35]:

32.	Den	mean	<i>waardeer</i>	en	<i>heel veel.</i>	
	DET.PL	man	appreciate	3SG.PRO	very much	
	'The men appreciate it very much.'					(Sranan/Dutch)

Similarly, in some languages like Quechua, imported verbs can freely appear with agglutinative verbal suffixes. An extreme example of this are bilingual songs, termed *wayno's*, in which in adjacent lines a Quechua verbal root and a semantically parallel Spanish verbal root appear. The Quechua suffixes they receive are identical. In the following examples, culled from different *wayno's*, the Spanish origin verb *sabi-* 'know' (<Sp. *saber*) alternates with Quechua *yacha-* 'know' [9]:

33.	yacha-/sabi-lla-n-man	'if (s)he would know'
	yacha-/sabi-ra-nki-taq	'you did know'
	yacha-/sabi-ru-chun	'(s)he should know'
	yacha-/sabi-na-y rayku	'because of me knowing'
	yacha-/sabi-y-lla-wan	'with knowledge'
	yacha-/sabi-lla-y-man	'if I only knew'
	yacha-/sabi-y-lla yacha-/sabi-y-man	'if known I had known'

In the case of strategy 2, Indirect Insertion, a specialized morpheme is added to the foreign verb stem, as illustrated by Moravcsik [36]. Moravcsik claims that alien elements are never imported as verbs, but always as nouns. It could be that those languages that seemingly adopt an imported verb freely also have productive native noun verbalization strategies. This is certainly true in part for Quechua: many noun roots are also used as verbs. It also holds for Malay and Chinese. Southeast Asian languages are characterized by considerable multifunctionality in their lexicon.

There is additional evidence for Moravcsik's claim from an unexpected corner, namely the incorporation of imported verbs into Spanish and Germanic. Spanish has three conjugations (-ar, -ir, -er), of which the -ar conjugation class is the most productive one. Not unexpectedly, imported verbs are assigned to this class. However, they always take the ending -ear rather than -ar:

34.	box-ear	'to box'	(* box-ar)
	parquear	'to park'	
	surfear	'to surf'	
	mixear	'to mix'	
	rockear	'to rock'	
	hikear	'to hike'	

The suffix -ear is a verbalizing suffix in native Spanish morphology, generally with a causative or inchoative meaning similar to English -en, and used either transitively or intransitively:

35.	blanquear	'to whiten'
	flojear	'to weaken'
	hermosear	'to embellish'
	negrear	'to mix with blacks'
	rojear	'to redden'

Similarly, in Dutch, imported verbs are generally affixed with *-eren* (German *-ieren* is a parallel case) [37], unless they are recent loans from English.

36.	control-eren	'to check' (< Fr. contrôler)
	farc-eren	'to stuff' (< Fr. farcir)
	antichambr-eren	'to wait in a waiting room' (< Fr. antichambre)
37.	sav-en	'to save (a file)'
	boost-en	'to boost'
	screen-en	'to screen'

The cases involving *-eren*, as can be seen, do not always derive from French *-er* infinitives.

Regarding Strategy 3, the Light Verb or BCV strategy, it is clear that it is not limited to the language area under consideration in this paper. To begin with, we find several cases involving Amerindian languages. One involves the Mexican Otomanguean language Popoloca as it interacts with Spanish. In non-contact Popoloca, two verbs combine with a noun to form active and inactive predicates, respectively:

38.	tú	'pass, occur'
	tú šu:a?	'be cured' (cf. šu:a? 'medicine')
39.	č?e:	'cause, make'
	č?e: šu:à	'cure' (cf. šu:a? 'medicine')

These same verbs can be combined with Spanish elements, mostly but not exclusively verbs [38] (pp. 160, 289, 290, 441, 479). Again, there is a distinction between active and inactive predicates:

40.	tú yuda	'help' (<Sp. <i>ayudar</i>)
	tú mantene	'maintain oneself' (<Sp. <i>mantener-se</i>)
	tú kompara	'compare' (<Sp. <i>comparar</i>)
41.	č?e: pinta	'Paint' (<Sp. <i>pintar</i>)
	č?e: rega	'irrigate' (<Sp. <i>regar</i>)
	č?e: daniu	'damage' (<Sp. <i>daño</i> 'damage' (n.))
	č?e: kasa	'hunt' (<Sp. <i>cazar</i>)
	č?e: kompone	'repair' (<Sp. <i>componer</i>)
	č?e: kompañā	'accompany' (<Sp. <i>acompañar</i>)

(Popoloca/Spanish)

A similar contrast can be found in Navaho/English language contact, as described in Canfield [39]. Once again, two different Navaho verbs are involved, one used in intransitive, and one in transitive predicates.

42.	swimming	ashťí	(intransitive verbs)
		1.do/be	
	'I am swimming.'		
43.	Nancy	bich'i' show	ánílééh (transitive verbs)
		3.to	2.make
	'Nancy shows me.'		(Navaho/English) [39]
			(p. 219)

These examples (and as shown by Wohlgemuth [32] there are other cases as well) show that these structures are indeed also possible in other language families.

There is one pattern not distinguished by Wohlgemuth. There are a number of languages where a native auxiliary meaning 'do' is combined with a verb phrase containing an imported infinitive, such

as Moroccan Arabic/Dutch bilingual speech [40], and Hausa/English bilingual speech [41]. These must be distinguished from the BCVs discussed in this article on a number of grounds, all coming back to the fact that the combination in Turkish, Sarnami, *etc.* forms a single unit. As argued by Muysken [9,10], the Moroccan Arabic/Dutch example is more like an auxiliary construction.

In conclusion of this section, we can say that BCV [verb + verb] compounds are a frequent, though not universal pattern in the process of incorporating foreign verbs. Cases where foreign verbs are incorporated using a verbalizing suffix used with native nouns and adjectives may be a special case of the bilingual compound pattern. Obviously, much more thorough cross-linguistic research is needed here.

Given the array of languages in which BCVs occur, we can ask ourselves if there is a particular parametrized typological property that would tend to give rise to this pattern. In Table 3, I present some of the possible features that may be involved in the rise of these constructions.

Table 3. BCV constructions in the area under consideration.

Language	Complex Verbs	Word Order	Verb Morphology
Tamil	+	OV	Agglutinative
Indo-Aryan	+	OV	Inflectional
Pashto	+	OV	Inflectional
Persian	+	OV	Inflectional
Kurdish	+	OV	Inflectional
Turkish	±	OV	Agglutinative
Arabic	-	SVO/VSO	Template/fusional
Greek	-	SVO	Inflectional

At first sight, the Indo-Iranian cluster of languages would seem to have the most “typological poise” for the BCV construction: they have a range of complex verb constructions, they have fairly rigid OV order (with the verbs as a cluster in post-object position), and they have inflectional morphology, making simple incorporation of verb stems via either Strategy 1: Direct Insertion, or Strategy 2: Indirect Insertion very difficult.

Tamil and Turkish are less likely candidates, from the perspective of typological poise, and Arabic and Greek frankly unlikely candidates from the perspective of word order and presence of complex verbs, but their fusional and inflectional morphologies are propitious for the rise of BCVs.

Given the variety of typological profiles of the languages involved, I think it is difficult to embrace the “typological poise” argument wholeheartedly at this point. Of course, “typological poise” as a notion needs to be further theorized and empirically explored, but to give but one example, the contrast between Turkish and Quechua as regards BCVs is striking. The languages have been argued to be typologically uncannily similar (leading to ill-founded claims of historical relatedness), but in Quechua Spanish verbs are freely adopted via the direct strategy, while this is not possible in Turkish. Of course, it could be that other factors (such as the presence of vowel harmony in Turkish but not Quechua) have played a role, but this simply illustrates the difficulty of the concept of “typological poise”. It is also interesting to consider the cases, such as Moroccan Arabic and Hausa, where BCVs have not emerged in bilingual varieties, but rather a parallel strategy of auxiliary insertion. These cases suggest that the absence (Moroccan Arabic, Hausa) or presence (Indo-Iranian) of verb compounding in the monolingual variety could be a triggering factor.

In the next section, we turn to possible historical explanations for the emergence of BCVs. It is possible of course, that the languages at the heart of the linguistic area discussed here, the Indo-Aryan languages, did show the requisite typological poise, as did neighboring Tamil and Turkish to a lesser extent, but that the spread into Greek and Arabic is better seen as the result of prestige language pressure in Ottoman times.

5. Historical Sources for the Areal Feature: Persian or Turkish?

In discussing the historical origin of BCVs in the languages of the area under consideration, we need to distinguish two issues: the spread of complex verb constructions altogether, and the spread of BCVs.

To begin with the first category, Hook [42] (p. 62) argues that the complex verb construction as such was innovation in Indo-Aryan: “It may have come into Indo-Aryan as a calque on parallel (and more ancient) structures in Dravidian or in Altaic.” Thus, the ultimate source of complex verbs as such remains an open question. It is clear that they were widely spread in all branches of the Indo-Aryan family in the more recent periods, relevant to the BCV at stake here.

In a scenario where the BCV feature is assumed to be a specific areal phenomenon with a historical source, there are two likely candidates for its origin: Persian and Turkish. Masica [43] (p. 368) discusses the compound verbs in the Indo-Aryan languages of South Asia in some detail and notes that they always involve a noun or adjective preceding the verb. He also notes [43] (p. 368) that the construction at hand is mostly characteristic of northern Indo-Aryan languages, suggesting Persian influence. It was in northern India that Persian influence was strongest. In addition, he mentions the bi-verbal compound construction [43] (p. 75): “English *verbs* (emphasis CM) are typically borrowed by incorporating them into the ‘nominal’ slot of such complexes.”

Windfuhr [44] (p. 123); see also [45]) discusses “... the general tendency, beginning in Early New Persian, to replace simple verbs by compound verb constructions consisting of a nominal followed by a relatively small set of verbs, the most frequent of which are *kard-ân* ‘to do, make’ and *šodan* ‘to become’ (originally ‘to go’).” Along the same lines, Mahootian [46] (p. 283) mentions four verbs used in these Persian noun + verb compounds. Notice that the nonverbal element precedes the verb.

44.	kærdæn	‘do’
	šodæn	‘become’
	zædæn	‘strike’
	dadæn	‘give’

Thus Early New Persian is a plausible source for the construction in the Indo-Aryan varieties.

However, Johanson (personal communication; see also [47]) suggests that it is unlikely that Persian was the source for the construction in Turkish. There are many Turkic languages with [noun + verb], and some even with [verb + verb] combinations. In Azerbaijani [48], (p. 253) nouns and adjectives are combined with <e.>le-, <e.>t-, and *gıl-* ‘do’, and *ol-* ‘become’. An example is:

45.	niyyet <e.>le-
	intention do
	‘intend’

In a similar vein, Kirchner [49] (p. 324) notes about Kazakh: “Numerous verbs consist of a native or foreign nominal element plus an auxiliary verb such as *et-* or *gıl-*,”. Examples include:

46.	čarg et- ‘flash up’
	ümit gıl- ‘hope’

In Turkmen [50] (p. 266), a number of verbs can be combined with adjectives and nouns:

47.	et-	‘make’
	bol-	‘become’
	ber-	‘give’
	çek-	‘draw’
	gör-	‘see’
	at-	‘throw’
	tut-	‘take, keep’

In Chuvash [51] (p. 451), we find combinations such as:

48. as-tu-
memory-make
'remember'

For Tatar and Bashkir Árpád [52] (p. 291) provides examples such as:

49. xedmet it-
job do
'work'

Stachowski and Menz [53] (p. 430) give several examples for Yakut of combinations involving *gîn*- 'do':

50. külü: *gîn* 'ridicule'
svoni *gîn* 'make a telephone call' (<Ru. *zvonit*)
birasti *gîn* 'apologise' (<Ru. *prostit*)

In the first example, a native noun is combined with *gîn*, while in the other two it is an imported Russian word. Stachowski and Menz [53] (p. 430) note that "Russian verbs may be copied in stereotyped forms and inserted into a Yakut frame by means of pro-verbs such as *gîn*"

From the other, western, side of the Turkic area, Kerslake [54] (p. 191) provides examples of Arabic verbal nouns combined with the Ottoman Turkish auxiliary verbs <e.>t- and ol-:

51. tesli:m <e.>t- 'surrender'
irsa:l <e.>t- 'send'
na:il ol- 'obtain'
za:yi ol- 'be lost'

Thus there are data from a variety of Turkic languages as diverse and distant from each other as Azerbaijanian, Kazakh, Turkmen, Chuvash, Tatar and Bashkir, Yakut, and Ottoman Turkish showing that there are [noun + verb] combinations, some of which are also used as a structure to accommodate imported elements, including verbs. This makes it unlikely that the structure in question is due to Persian influence. If anything, a reverse direction of influence would be more likely at the time of emergence of Early New Persian.

This does not mean that there has been no influence of Persian on varieties of Turkic. Johanson [55] (p. 334) argues that "In Irano-Turkic varieties, most phraseological verbs consisting of a nominal item and an auxiliary verb are mixed copies of Persian originals." The following examples are given:

52. täl<ao>š elä- 'endeavour' (<Pe. *tala:š kardan*)
telefon vur- 'telephone' [telephone strike] (<Pe. *telefon zadan*)
saggal vur-/ri:š vur- 'shave' [beard strike] (<Pe. *ri:š zadan*)

Furthermore, Durroei [56] argues that complex verbs in Persian are a new phenomenon. They are used to build new verbs from Arabic loans.

Concluding this section, we may tentatively state that if there is a single source for the BCV pattern at hand, Turkish is a more likely candidate than Persian. Obviously, more research is needed here, however, and this goes against the discussion in Section 4 about typological poise.

6. Conclusions and Further Discussion

High time to return to the original question posed at the beginning of this paper. From the areal perspective, there is the fact that two large and important language families, Turkic and Indo-Iranian, either rapidly developed or already had a productive [noun + verb] construction. On the universalist side, there is the fact that native [noun + verb] constructions very easily develop into [verb + verb] constructions in bilingual settings, though not in monolingual settings. Thus we have a bilingual universal here, as Muysken [10] argues, a universal characteristic of adult second language, but not child first language behavior.

If the position taken there is correct, it would mean that children would not be capable of learning complex [verb + verb] constructions, and the areal spread under discussion would be an interesting case of language change due to adult rather than child language use. I know no studies which can throw direct light on this issue, and confirm or disconfirm the prediction made. One reviewer argues, however, that once an areal feature gets established it becomes an inextricable part of the grammar of the language taking part in a linguistic area. This would imply that children will naturally acquire the structure under consideration irrespective of its complexity. Thus child acquisition data are crucial to help clear up this issue.

There is a bit of evidence from verbalizing suffixes, in a study by Bolonyai [57]. Bolonyai argues that in adult Hungarian–English BCVs the *-el, -ol* verbalizer is obligatory (cf. also [36]), as in *cover-ol-ja* [cover-VBZ-PR.3SG.DEF] ‘it covers it’, while young children (3;7–5;10) do not have this form very often. Instead, they have forms like *take-0-t-iink* [take-0-PA-1PL.INDEF] ‘they took’. Older children (6;8), Bolonyai has discovered, show a marked increase in the adult forms.

Three recent studies throw further light on these issues. In her analysis of oral narratives from Panjabi/English children (ages 4–6), Crutchley [58] found that BCVs were particularly attested among less proficient bilingual children (i.e., “beginner bilinguals”) who produced switched utterances that were shorter and less grammatically complex. Thus, Panjabi/English children’s use of BCVs were not associated with syntactic complexity or innovation at the utterance level.

Furthermore, in a cross-generational analysis of 1750 Spanish/English BCVs, Balam [59] found that innovative forms of BCVs in passive and control structures were particularly found in the speech of highly proficient second generation Spanish/English bilinguals, suggesting that initial emergence of novel BCV forms may more likely occur amongst highly proficient adult bilinguals rather than children or adolescents with lower levels of bilingual proficiency (for relevant discussion, see Balam [60]). In a subsequent paper, Balam and Prada Pérez [61] found that BCVs did frequently occur in complex, clausal contexts. In fact, BCVs were found to occur particularly in subordinate nominal and adverbial clauses. Thus, BCVs in post-adolescent and adult speech are associated with high grammatical complexity. This means that even if these structures are indeed adult second language structures (and much more work is needed to establish that), they can be associated with high grammatical competence. Clearly, more work is needed on this point. A relevant issue that warrants further investigation is the role of language experience (i.e., exposure to BCVs). Bhatia and Ritchie [1,2] discuss evidence based upon intuitional data from adult second language learners of Hindi (with only one year of exposure to Hindi) and propose that knowledge of the essential features of the light verb construction in bilingual (Hindi–English) sentences is available via Universal Grammar.

One important issue not touched upon in this paper so far concerns the social dimensions of the phenomenon of BCVs. Two dimensions should be taken into account here: first of all, the frequent occurrence of BCVs is only possible if the speakers of the community language either have fairly relaxed norms about proper usage, as with some heritage varieties in multilingual diaspora contexts (an example would be Sarnami Hindi in Surinam which accepts verbs both from Dutch and from the creole language Sranantongo in BCVs), or accept the use of words from a prestige language in a post-colonial context in BCVs.

The second dimension concerns the motivation for incorporating foreign verbs in BCV constructions. It is clear that in some cases this concerns words in very specific semantic domains prone to borrowing, as shown, e.g., in [30]. However, it is clear even from early studies such as [14] that there are few semantic bounds on the adoption of foreign words once a proper introduction channel, either morphological or via BCVs, has been established. The social dimensions of BCVs as a special case of borrowing and bilingual language use clearly requires more work.

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Glosses and Transcription Conventions

In Tamil examples, capitals are used for retroflex consonants.

(IN)DEF = (in)definite
 1SG *etc.* = first person singular
 ACC = accusative
 CL = clitic
 COMP
 DAT = dative
 DET = determiner
 DM.PRX = proximate demonstrative
 ERG = ergative
 FUT = future
 FUT = future
 GEN = genitive
 INF = infinitive
 IPFV = imperfective
 M = masculine
 M = mood
 PF = perfective
 PL = plural
 POSS = possessive
 PP = past participle
 PR = progressive
 PRO = pronoun
 PRS = present
 PST = past tense

References

1. Bhatia, T.K.; Ritchie, W.C. Language Mixing and Second Language Acquisition: Some Issues and Perspectives. In *The Development of Second Language Grammars: A Generative Approach*; Klein, E., Gita Martohardjono, G., Eds.; John Benjamins: Amsterdam, The Netherlands, 1999; pp. 245–271.
2. Bhatia, T.K.; Ritchie, W.C. Language mixing, typology, and second language acquisition. In *South Asian Languages: Contact, Convergence, and Typology*; Bhaskararao, P., Subbarao, K., Eds.; Sage: London, UK; Delhi, India, 2001; pp. 37–62.
3. Enfield, N. Linguistic epidemiology. In *Semantics and Grammar of Language Contact in Mainland Southeast Asia*; Routledge: London, UK, 2002.
4. Backus, A. Two in one. Bilingual Speech of Turkish Immigrants in the Netherlands. Ph.D. Thesis, Tilburg University, Tilburg, the Netherlands, 1996.
5. Backus, A. *Patterns of Language Mixing. A Study in Turkish/Dutch Bilingualism*; Otto Harassowitz: Wiesbaden, Germany, 1992.
6. Pfaff, C. Development and use of *et-* and *yap-* by Turkish/German bilingual children. In *Studies on Turkish and Turkish Languages*; Göksel, A., Kerslake, C., Eds.; Otto Harassowitz: Wiesbaden, Germany, 2000; pp. 365–373.

7. Türker, E. “Fremmedord bilmiyom”. A Sociolinguistic Study of Second Generation Immigrant Turkish in Norway, Master’s Thesis, University of Oslo, Oslo, Norway, 1993.
8. Türker, E. Semantic Triggering in Codeswitching. In Presented at the Norwegian Institute Seminar on Language Contact, Rome, Italy, 4–8 November 1996.
9. Muysken, P. *Bilingual Speech: A Typology of Code-Mixing*; Cambridge University Press: Cambridge, UK, 2000.
10. Muysken, P. Storage and computation in language contact. In *Computation and Storage in Language*; Nooteboom, S., Weerman, F., Wijnen, F., Eds.; Kluwer Academic: Dordrecht, The Netherlands, 2002.
11. Butt, M. The light verb jungle. In Presentation at Workshop on Multi-Verb Constructions, University of Trondheim, Trondheim, Norway, 26–27 June 2003.
12. Rosen, S. Argument Structure and Complex Predicates. Ph.D. Thesis, Brandeis University, Waltham, MA, USA, 1989.
13. Chatterjee, T. Bilingual complex verbs: So what is new about them? In Proceedings of the 38th Meeting of the Berkely Linguistics Society; University of California at Berkeley: Berkeley, CA, USA, 2014; pp. 47–62.
14. Shanmugan Pillai, M. English borrowings in educated Tamil. In *Studies in Indian Linguistics*; Krishnamurti, B., Ed.; Deccan College: Poona, India, 1968; pp. 296–306.
15. Sankoff, D.; Poplack, S.; Vanniarajan, S. The case of the nonce loan in Tamil. In *Language Variation and Change*; Cambridge University Press: Cambridge, UK, 1990; Volume 2, pp. 71–101.
16. Annamalai, E. The language factor in code mixing. *Int. J. Sociol. Lang.* **1989**, *75*, 47–54. [[CrossRef](#)]
17. Annamalai, E. Review of Ira Pandit, Hindi-English code-switching: Mixed Hindi-English. *Indian Linguist.* **1987**, *48*, 121–123.
18. Romaine, S. *Bilingualism*, 2nd ed.; Blackwell: Oxford, UK, 1995.
19. Kishna, S. Lexicale Interferentie in Het Sarnami. Master’s Thesis, University of Amsterdam, Amsterdam, Netherlands, 1979.
20. Roberts, T. Clitics and agreement. Doctoral dissertation, MIT, Cambridge, MA, USA, 2001.
21. Khan, A.A.; Muysken, P.C. Strategies for incorporating nouns and verbs in code-mixing: the case of Pashto-English bilingual speech. *Lapurdum* **2014**, *18*, 97–137.
22. Dabir-Moghaddam, M. Compound Verbs in Persian. *Stud. Linguist. Sci.* **1997**, *27*, 25–59.
23. Lotfabadi, L.N. Disagreement in agreement A study of grammatical aspects of codeswitching in Swedish/Persian bilingual speech. Unpublished doctoral dissertation, Stockholm University, Stockholm, Sweden, 2002.
24. Rashid, M. English-Kurdish Dictionary. Available online: <http://hem.passagen.se/eramura/engelska/dictionary/abclista.htm> (accessed on 24 August 2015).
25. Dorleijn, M. The Decay of Ergativity in Kurmanci. Ph.D. Thesis, University of Amsterdam, Amsterdam, Netherlands, 1996.
26. Kieffer, C. The Arabic speech of Bactria (Afghanistan). In *Arabic as a Minority Language*; Owens, J., Ed.; Mouton de Gruyter: Berlin, Germany, 2000; pp. 181–198.
27. Procházka, S. The Arabic dialects of Cilicia (Southern Turkey). In Proceedings of the 2nd International Conference of L’Association Internationale pour la Dialectologie Arabe, University of Cambridge, Cambridge, UK, 10–14 September 1995; pp. 189–196.
28. Rudin, C.; Eminov, A. Bulgarian Turkish: The linguistic effects of recent nationality policy. *Anthropol. Linguist.* **1990**, *32*, 149–163.
29. Seaman, P.D. *Modern Greek and American English*; Mouton: The Hague, the Netherlands, 1972.
30. Fotiou, C. Are the Greek verbs No Longer Enough? Bilingual Compound Verbs in Cypriot Greek. In *Linguists of Tomorrow. Selected Papers from the 1st Cyprus Post-Graduate Student Conference in Theoretical and Applied Linguistics*; Grohmann, K.K., Shelkovaya, A., Zoumpalidis, D., Eds.; Cambridge Scholar Publishing: Newcastle upon Tyne, UK, 2012; pp. 22–50.
31. Joseph, B.D.; Philippaki-Warbuton, I. *Modern Greek*; Croom Helm: London, UK, 1987.
32. Wohlgemuth, J. *A Typology of Verbal Borrowings*; Mouton de Gruyter: Berlin, Germany, 2009.
33. Mifsud, M. *Bilingual verbs in Maltese: A descriptive and comparative study*; E.J. Brill: Leiden, The Netherlands, 1995.
34. Kossmann, M. *The Arabic influence on Northern Berber*; Brill: Leiden, The Netherlands, 2013.
35. Bolle, J. Sranan Tongo—Nederlands, Code-Wisseling en Ontlening. Master’s Thesis, University of Amsterdam, Amsterdam, The Netherlands, 1994.

36. Moravcsik, E. Verb borrowing. *Wien. Linguist. Gaz.* **1975**, *8*, 3–31.
37. Treffers-Daller, J. *Mixing Two Languages, French-Dutch Contact in a Comparative Perspective*; Mouton de Gruyter: Berlin, Germany, 1994.
38. Veerman-Leichsenring, A. *Gramática del Popoloca de Mezontla (con vocabulario y textos)*; Rodopi: Amsterdam, The Netherlands, 1991.
39. Canfield, K. Navaho-English code-mixing. *Anthropol. Linguist.* **1980**, *22*, 218–220.
40. Boumans, L. The Syntax of Codeswitching: Analysing Moroccan Arabic/Dutch Conversations. Ph.D. Thesis, Radboud University, Nijmegen, The Netherlands, 1998.
41. Madaki, R. A Linguistic and Pragmatic Analysis of Hausa-English Code-Switching. Doctoral Dissertation, University of Michigan, Ann Arbor, MI, USA, 1983.
42. Hook, P. The emergence of perfective aspect in Indo Aryan languages. In *Approaches to Grammaticalization II. Focus on Types of Grammatical Markers*; Traugott, E.C., Heine, B., Eds.; Benjamins: Amsterdam, The Netherlands, 1991; pp. 59–89.
43. Masica, C.P. *The Indo-Aryan Languages*; Cambridge University Press: Cambridge, UK, 1991.
44. Windfuhr, G.L. Persian. In *The Major Languages of South Asia, the Middle East, and Africa*; Comrie, B., Ed.; Routledge: London, UK, 1987.
45. Windfuhr, G.L. *Persian Grammar. History and State of Its Study*; Mouton: Berlin, Germany, 1979.
46. Mahootian, S. *Persian*; Routledge: London, UK, 1997.
47. Johanson, L. *Strukturelle Faktoren in Türkische Sprachkontakten*; Franz Steiner Verlag: Stuttgart, Germany, 1992.
48. Schöning, C. Azerbaijani. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 434–452.
49. Kirchner, M. Kazakh and Karakalpak. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 318–332.
50. Schöning, C. Turkmen. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 261–272.
51. Clark, L. Chuvash. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 434–452.
52. Árpád, B. Tatar and Bashkir. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 283–300.
53. Stachowski, M.; Menz, A. Yakut. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 417–433.
54. Kerslake, C. Ottoman Turkish. In *The Turkic Languages*; Johanson, L., Ágnes Csató, É., Eds.; Routledge: London, UK, 1998; pp. 179–202.
55. Johanson, L. Code-copying in Irano-Turkic. *Lang. Sci.* **1998**, *20*, 325–337. [[CrossRef](#)]
56. Durroei, S.R. The Evolution of Ergativity in Kurdish and Indo-Iranian. Available online: <http://www.cogsci.ed.ac.uk/~siamakr/Kurdish/KURDICA/2001/3/ergativity.html> (accessed on 24 August 2015).
57. Bolonyai, A. Verbs don't come easy. Bilingual verb formation in language contact and acquisition. In Presented at NWAVE 31, University of Pennsylvania, Philadelphia, PA, USA, 2003.
58. Crutchley, A. Bilingual compound verbs in children's Panjabi-English code-switched narratives. *Linguist. Approaches Biling.* **2015**, *5*, 2–29. [[CrossRef](#)]
59. Balam, O. Code-switching and linguistic evolution: The case of 'Hacer + V' in Orange Walk, Northern Belize. *Lengua y Migración* **2015**, *7*, 83–109.
60. Balam, O. Mixed verbs in contact Spanish: Patterns of use among emergent and dynamic bi/multilinguals. Languages, Accepted for publication. 2016.
61. Balam, O.; de Prada, P.A. On the productive use of 'Hacer + V' in Northern Belize bilingual/trilingual code-switching. In *Code-Switching in the Spanish-Speaking Caribbean and Its Diaspora*; Guzzardo Tamargo, R.E., Mazak, D., Parafita Couto, M.C., Eds.; Benjamins: Amsterdam, The Netherlands. (in press)

