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## **Word order and information structure in Modern Eastern Armenian**

In this article we analyze some characteristics of word order in Modern Eastern Armenian – henceforth MEA – which are especially interesting from a comparative point of view; in particular, we consider the position of the auxiliary. The auxiliary is in most sentences enclitic on the participle, but in certain contexts it can cliticize on other items as well, located at a distance from it. In these cases, the auxiliary may end up in a position not adjacent to the participle at all, on the left of its normal cliticization site.<sup>1</sup>

The analysis of the contexts allowing this peculiar order sheds light on the syntactic properties of MEA. We show that when the auxiliary is cliticized on something other than the participle, it obligatorily signals that the phrase in question is either a contrastive focus or an interrogative element. We argue that these structures are instances of a very well-known phenomenon concerning word order, namely Verb Second – henceforth V2. V2 is a property of several languages around the world, such as for instance Germanic languages and some Indo-Aryan languages, such as Kashmiri.<sup>2</sup> We compare MEA with German and English on one side, and Kashmiri on the other, and show that MEA is an intermediate case, realizing properties of both types of languages. In particular, we argue that in MEA, as in Kashmiri, and to a lesser extent in English, V2 is sensitive to the information structure of the sentence, namely to the distinction between *given* and *new* information.

This analysis can be relevant both from a descriptive and typological point of view, investigating properties of MEA not fully understood before, and from a theoretical one, providing insights on

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\*The authors have elaborated every part of this work together. However, as far as legal requirements are concerned, Alessandra Giorgi takes official responsibility for sections 1, 2 and the conclusions and Sona Haroutyunian for sections 3 and 4.

<sup>1</sup> In this work, we consider only sentences with *definite* objects, given that indefinites have a special distribution and peculiar properties, which we will address in further work.

<sup>2</sup> English has a special type of V2, which has been dubbed in the literature *residual V2* (see Rizzi, 1990). We discuss this issue in section 2. Note that the theoretical framework we are adopting for this work is the generative one, developed by Noam Chomsky and scholars.

the very nature of V2 phenomena.

This paper is organized as follows: in section 2 we present word order issues in very general terms, comparing evidence from English, German and Italian. In section 3 we consider the position of the auxiliary in MEA; in section 4 we compare MEA with Kashmiri. In the end we draw some conclusions.

## 2. Word order across languages

Scholars of linguistic typology have extensively studied word order variations, especially with respect to the reciprocal order of Subject, Object and Verb.<sup>3</sup>

From the figures for the sample of 1228 languages collected for The World Atlas of Language Structures, it has been concluded that most languages have either an SOV or an SVO order.<sup>4</sup>

(1)

order	#	Non-exhaustive list
SOV	497	Japanese, Indo-Aryan languages
SVO	436	English, Romance
VSO	85	Arabic, Celtic
VOS	26	Malagasy, Fijian
OVS	9	Hixkarayana (Amazon)
OSV	4	Xavante (Mato Grosso)
No Dominant order	171	

According to this table, for instance, English is classified as a language with a SVO order. This means that in a declarative sentence the subject (S) is followed by the verb (V), which is in turn followed by the object (O):<sup>5</sup>

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<sup>3</sup> Cf. among the many others Greenberg (1963) and Comrie (1989).

<sup>4</sup> WALS, Dryer, Matthew S. & Haspelmath, Martin (2013). In the third column, a sample of languages with the order in question is provided.

<sup>5</sup> Note that classifying a language as belonging to a certain type does not entail at all that that particular word order is the only one available. It only means that that order is statistically the most frequent in out-of-the-blue sentences, namely in sentences used as assertions in absence of background context. Other orders are always possible, but they are in general justified by

(2) John ate an apple.

This order can be used out-of-the-blue, to begin a conversation, in that it does not require a previous context and is usually referred to as the *unmarked order*.

In what follows we will show that, as soon as we consider a larger corpus of sentence types, a more sophisticated linguistic analysis is needed to really make sense of word order variations.

## 2.1 declarative sentences

Let's consider now the basic word order of a declarative sentence in English, German and Italian. We see that the inflected verb intervenes between the subject and the object:

(3) John ate an apple (English)

(4) Hans ass einen Apfel (German)

(5) Gianni mangiò una mela (Italian)

S      V      O

From these examples, it might seem that English, German and Italian have the same word order. However, as soon as we consider the periphrastic verbal forms, we see that this generalization cannot be maintained:

(6) John has eaten an apple

S   AUX   Vprt   O

(7) Hans hat einen Apfel gegessen

S   AUX   O      Vprt

(8) Gianni ha mangiato una mela

S      AUX   Vprt      O

English and Italian pattern alike and the auxiliary and the participle in this case are adjacent. German exhibits a different word order, in that the past participle appears after the object. Note that,

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informational reasons, i.e. by the intention of the speaker to emphasize, or de-emphasize, a portion of the sentence. In this section we are considering assertive, out-of-the-blue order.

importantly, the order in (7) for German is also an unmarked one, given that it can be used in absence of previous context, to open a conversation.

Let's consider now word order in subordinate clauses:

- (9) John said that Mary ate/ has eaten an apple

that S V/ AUX Vprt O

- (10) Hans sagte **dass** Marie einen Apfel ass

dass S O V

Hans said that Marie an apple ate

- (11) Hans sagte **dass** Marie einen Apfel gegessen hat

dass S O Vprt AUX

Hans said that Marie an apple eaten has

- (12) Hans sagte Marie ass einen Apfel

S V O

Hans said Marie ate an apple

- (13) Hans sagte Marie hat einen Apfel gegessen

S AUX O Vprt

Hans said Marie has an apple eaten

- (14) Gianni ha detto che Maria mangiò/ ha mangiato una mela

che S V/ AUX Vprt O

Gianni said that Maria ate/ has eaten an apple

*That*, *dass*, and *che* introduce a subordinate clause. They are called Complementizers and labeled “C”. In this case, English and Italian pattern alike and German differs. In English and Italian there is no difference between main and subordinate clause. On the contrary, in German when the complementizer is missing – i.e. the sentence is not introduced by *dass* – the verb appears in second

position and not at the end of the clause, yielding the same word order found in main clauses.<sup>6</sup>

## 2.2 Interrogative sentences

Let's consider now word order in interrogative clauses. In this case English and German pattern alike with respect to the reciprocal position of auxiliary and subject, differing from Italian, as illustrated in the following examples:<sup>7</sup>

(15) What have you eaten?  
O-int AUX S Vprt

(16) Was hast du gegessen?  
O-int AUX S Vprt  
What have you eaten

(17) Che cosa (tu) hai mangiato?  
O-int S AUX Vprt  
What (you) have eaten

(18) \*Che cosa hai tu mangiato?  
O-int AUX S Vprt  
What have you eaten

The auxiliary in German and English follows the interrogative phrase and immediately precedes the subject. In Italian, on the contrary, the corresponding order – given in example (18) – is sharply

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<sup>6</sup> In English and in Italian as well the complementizer can be omitted in certain structures, but with patterns very different from the German one. A comparative analysis of these properties is however not relevant to the goals of this work, hence it will be not pursued here.

<sup>7</sup> In English this word order is instantiated in a few other case as well, for instance when the sentence begins with a negative operator:

- i. Not only has John left...

ungrammatical, contrasting with example (17).<sup>8</sup>

In what follows we will briefly illustrate the answer proposed in the generative literature to the following questions:

- (19) How can we account for these properties?
- (20) What triggers the different orderings in the various languages?

The generalizations which have been discussed in the literature and which will be relevant to our analysis of MEA can be phrased as follows:<sup>9</sup>

- (21) In German the Finite Verb – i.e. the part of the verbal complex carrying tense and agreement (person and number) – is in second position, except in a subordinate clause introduced by the complementizer *dass*.
  - In English, the verb is in second position only in interrogative clauses.<sup>10</sup>

This particular word order is labeled *Verb Second* and is found in many languages belonging to different language groups. A language can therefore be defined a V2 one when the finite verb is the second constituent, in main and/or subordinate clauses.<sup>11</sup>

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<sup>8</sup> In Italian in these examples, the so-called *zero* subject is the preferred option. What is relevant here is that, independently of this consideration, in no case can the subject appear between the auxiliary and the participle.

<sup>9</sup> The literature on V2 is quite extensive. For a recent review and further references, see among the many others Holmberg (2015) and Cognola (2015).

<sup>10</sup> See also fn.5 above.

<sup>11</sup> Holmberg (2015:1) provides the following list of V2 languages:

“V2 is characteristic of the Germanic languages, with Modern English as the only exception. Among the modern Romance languages, only some of the Rhaetoromance languages/dialects have the V2 property (Poletto 2002, Anderson 2006), but, according to Beninca’ (1983/1984, 2006) it was characteristic of many, or even all Medieval Romance languages (see Roberts (1993) on Old French, Fontana (1993, 1997) on Old Spanish). Among the modern Celtic languages, Breton has V2, but it was earlier more wide-spread at least among the Brythonic Celtic languages (Willis 1998). Among the Finno-Ugric languages, Estonian has V2. Among the Slavic languages, Sorbian

In certain languages, such as for instance German, V2 order is displayed in all clauses, both main and subordinate (as far as German is concerned, provided that *dass* is absent), but in other ones such as English, we find them only in certain contexts, most notably in interrogative constructions. When this happens the language in question is called a *residual V2* one. This terminology was introduced by Rizzi (1990), who hypothesized that for English the V2 order illustrated above in example (15) is a residue of an old, more general, V2 system.

In the literature, V2 phenomena have been studied extensively, and proposing an exhaustive discussion of all the properties connected with it is not the object of this work. We will only point out the main characteristics relevant for our analysis. We will show that MEA resembles English in that it displays V2 properties only in certain constructions, among which *wh*-sentences.<sup>12</sup>

### 3. Word order phenomena in MEA

In this section we discuss the main phenomena of word order in MEA. As discussed in the previous literature – cf. for instance Dum Tragut (2009) – MEA is a verb final language, i.e. SOV. This means that out-of the blue sentences mostly exhibit the word order exemplified in (22):<sup>13</sup>

- (22) Siran-ə salor-ə ker-el ē  
 Siran-the plum-the eat-past.prt AUX.3sg  
 Siran ate the plum

In example (22) the verb is a periphrastic form; in MEA all indicative verbal forms, present tense included, are periphrastic, with the exception of the aorist. They are formed by a participle plus an auxiliary; the auxiliary is always the verb *be*. The participle is not inflected, whereas the auxiliary is inflected for person and number and is enclitic on the participle. The following sentence shows that the SOV order holds for the aorist as well:

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is reported to have V2 [...]. Outside Europe, Kashmiri, an Indo-Aryan language, is a V2 language (Bhatt 1999) [...].”

<sup>12</sup> In order to have a proper account for MEA in terms of residual V2, one should look at the properties of Grabar, the old Armenian language. We will consider this issue in future research.

<sup>13</sup> In this paper for the Armenian examples we adopt the Hübschmann-Meillet system of transliteration.

- (23) Siran-ə salor-ə ker-av  
 Siran-the plum-the ate-AOR.3sg  
 Siran ate the plum

Note that in a sentence such as (22) nothing can intervene between the participle and the auxiliary. For instance, adverbs cannot appear between the V and Aux, as shown by the ungrammaticality of example (24):

- (24) \*Siran-ə zang-el hačax ē  
 Siran-the call-past.prt often AUX.3sg

The adverb must precede the participle, as illustrated in example (25):

- (25) Siran-ə hačax zang-el ē  
 Siran-the often call-past.prt AUX.3sg  
 Siran often called

Adverbs can also appear in other positions, for instance at the end of the clause, as in the following case:

- (26) Siran-ə zang-el ē hačax  
 Siran-the call-past.prt AUX.3sg often  
 Siran often called

We are not going to discuss the various possible orders of adverbs; for the aim of this work it is only relevant to point out that in these cases the auxiliary *must* indeed cliticize on the participle.

MEA exhibits other orders as well. For instance, in the sentence provided in (27), the object follows the verb, both with the periphrastic form and with the aorist, as shown in the following examples:<sup>14</sup>

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<sup>14</sup> In this work, we consider periphrastic verbal forms, given that the cliticization properties of the auxiliary give rise to very sharp data. The aorist partially shares the properties of the auxiliary, but it also requires an important component to be taken into account, which is the intonation associated to the various phrases in the sentence. For this reason, we will not consider in this work sentences with non-periphrastic verbal forms, but leave the investigation of these cases for further research.



(27) Siran-ə ker-el ē salor-ə  
 Siran-the eat-past.prt AUX.3sg plum-the  
 Siran ate the plum

(28) Siran-ə ker-av salor-ə  
 Siran-the ate-AOR.3sg plum-the  
 Siran ate the plum

In these cases, the object appears on the right of the verbal form. It is possible to account for this order by hypothesizing that the object is dislocated on the right – an operation available in many languages, such as for instance Italian, but that we are not going to investigate here.<sup>15</sup> The purpose of this work in fact is to explain the position of the auxiliary and, in particular, the apparent violations of the requirement that it be cliticized on the participle. In what follows, we discuss the cases where the auxiliary is not an enclitic on the participle, but on some other phrase.

As already noted in the literature – cf. among the others Tamrazian (1991, 1994) – the auxiliary can precede the participle and cliticize on various constituents. Consider for instance the following example:

(29) SIRAN-n ē salor-ə ker-el, woč' t'e Mariam- ə  
 SIRAN-the AUX.3sg plum-the eat-past.prt, not Mariam-the  
 Siran-FOC ate the plum, not Mariam

In example (29) the subject is the leftmost phrase and the auxiliary is enclitic on it. The only possible reading associated with the phrase preceding the auxiliary is a *focus* one.<sup>16</sup> This sentence

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<sup>15</sup> For a recent discussion of right dislocation, see Samek-Lodovici (2015, ch. 4).

<sup>16</sup> For a definition of focus, see Krifka & Musan (2012). The definition they provide (ch.1 p7) is the following:

- i. Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions.

Focus is new information, as opposed to topic, which is in general given information. In many languages, as for instance in Italian, focus is also associated with a special intonation. Armenian as well presents interesting intonation properties in these cases, which however, we are disregarding in

can be uttered by a speaker to correct a previous assertion, which she considers mistaken. For instance, example (29) is felicitous in a discourse as an answer to sentence (30) uttered by speaker A:

- (30) A: Mariam-ə salor-ə ker-el ē  
Mariam-the plum-the eat-past.prt AUX.3sg  
Mariam ate the plum

Speaker B then corrects her by means of sentence (29) above. Namely, speaker B wants to emphasize that it is not Mariam who ate the plum, but Siran. Analogously, sentence (32) is felicitous as a correction, in a context where speaker A utters sentence (31):

- (31) A: Siran-ə xnjor-ə ker-el ē  
Siran-the apple-the eat-past.prt AUX.3sg  
Siran ate the apple
- (32) SALOR-n ē Siran-ə ker-el, woč' t'e xnjor- ə  
PLUM-the AUX.3sg Siran-the eat-past.prt, not apple-the  
Siran ate the plum-FOC, not the apple

In this case, the phrase preceding the auxiliary is the object and must be obligatorily focused, as in the previous one. Sentence (32) is used by Speaker B to make it explicit that it was not the apple Siran ate, but the plum.

The participle can be focused as well. Sentence (34) can be uttered as a correction to sentence (33), as shown in the following example:

- (33) A: Siran-ə lv-ac'el ē salor-ə  
Siran-the wash-past.prt AUX.3sg plum-the  
'Siran washed the plum'
- (34) KER-el ē Siran-ə salor-ə, woč' t'e lv-ac'el  
EAT-past.prt AUX.3sg Siran-the plum-the, not wash-past.prt

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this work. Focused phrases are written in capital.

Siran ate-FOC the plum, not washed

Interestingly, in this case the auxiliary is indeed enclitic on the participle, but the sentence carries a different informational value, with respect to the sentence in (22) above.

Adverbs can be focused as well:

- (35) YEREK ē Siran-ə salor-ə ker-el  
YESTERDAY AUX.3sg Siran-the plum-the eat-past.prt  
Siran has eaten the plum yesterday-FOC

- (36) YEREK ē salor-ə Siran-ə ker-el  
YESTERDAY AUX.3sg plum-the Siran-the eat-past.prt  
Siran has eaten the plum yesterday-FOC

These sentences show that an adverb can occupy the first position, independently of the reciprocal order of subject and object. Sentences (35) and (36) would be felicitous as corrections to an assertion such as the one in (37):

- (37) Siran-ə salor-ə ker-el ē ays aravot  
Siran-the plum-the eat-past.prt AUX.3sg this morning  
This morning Siran ate the plum

The auxiliary cannot be the first word in the sentence, as expected under Wackernagel's law:<sup>17</sup>

- (38) \*ē ker-el Siran-ə salor-ə  
AUX.3sg eat-past.prt Siran-the plum-the

Consider also that in many languages, as for instance in Italian, there is a ban against multiple focus. This property holds in MEA as well. Only one contrastive focus can appear on the left of the auxiliary:

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<sup>17</sup> For an interesting analysis of the relationship between Wackernagel's law and V2 phenomena, see Anderson (1993).

- (39) \*SIRAN-ə SALOR-n ē ker-el  
 SIRAN-the PLUM-the AUX.3sg eat-past.prt  
 Siran-FOC ate the plum-FOC
- (40) \*SALOR-ə SIRAN-n ē ker-el  
 PLUM-the SIRAN-the AUX.3sg eat-past.prt  
 Siran-FOC ate the plum-FOC
- (41) \*YEREK SALOR-n ē Siran-ə ker-el  
 yesterday-FOC plum-the-FOC AUX.3sg Siran-the eat-past.prt  
 Yesterday-FOC Siran ate the plum-FOC

These sentences are all ungrammatical, independently from the nature and the reciprocal orders of the phrases appearing on the left of the auxiliary.

Interestingly, however, the focused phrase can be preceded by another phrase, which is always interpreted as a topic, i.e. an element already mentioned in the previous context:

- (42) Siran-ə LONDON ē gnac'-el, woč' t'e Paris  
 Siran-the LONDON AUX.3sg go-past.prt, not Paris  
 Siran has gone to London-FOC, not to Paris

An appropriate context for example (42) is the following:

- (43) A: I verjo inč' woroš-ec' Siran-ə? Inj as-el ēr, wor gn-alu ēr Paris.  
 Finally what decide-AOR.3sg Siran-the? Me tell-past.prt AUX.past.3sg that go-fut.prt  
 AUX.past.3sg Paris  
 Finally, what did Siran decide? She told me that she would go to Paris

By means of (43), speaker A introduces *Siran* as a topic. In the answer (42), the topic *Siran* appears on the left of *London*, which on its turn is focused.

Analogously, the sentence in (44) provides a background for example (45):

- (44) A: Uz-um em London gn-al. Inj as-ac'in wor Mariam-n anc'yal šabat' ē mekn-el ayntel.  
 Wish-pr.prt AUX.1sg London go-inf. Me tell-AOR.3sg that Mariam-the last week

AUX.3sg leave-past.prt there

I would like to go to London. I was told that Mariam left for there last week

- (45) London SIRAN-n ē gnac'-el, woč' t'e Mariam-ə  
London SIRAN-the AUX.3sg go-past.prt, not Mariam-the  
'Siran-FOC has gone to London, not Mariam'

By means of sentence (44), speaker A introduces *London* as a topic. In the answer (45), *London* appears as a topic, and *Siran* is focused, as a correction with respect to the information appearing in the previous sentence.

Finally, the sentence in (46) provides the background for the answer in (47). The topic phrase in *yesterday* and the focus phrase is *London*.

- (46) A: Yerek inč' ar-ec' Siran-ə? Inj as-ac'in wor mekn-el ē Paris.  
Yesterday what do-AOR.3sg Siran-the? Me tell-AOR.3sg that leave-past.prt AUX.3sg Paris  
What did Siran do yesterday? I was told that she left for Paris
- (47) Yerek LONDON ē Siran-ə mekn-el, woč' t'e Paris  
Yesterday LONDON AUX.3sg Siran-the leave-past.prt, not Paris  
Yesterday Siran left for London-FOC, not for Paris

This phenomenon, i.e. the possibility for a topic to precede a focus on the left, is dubbed V3.<sup>18</sup> As argued in Giorgi and Haroutyunian (2014), the focused phrase and the topicalized one have very different syntactic properties, which is exactly what is expected according to recent theories on V2 phenomena (see Holmberg 2015).

Note also that in MEA there is no difference with respect to V2 phenomena between main and subordinate clauses. Consider in fact the following examples:

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<sup>18</sup> Note that beside a V3 order, we might have a V4 and so on. Consider for instance the following sentence:

- i. Yerek London SIRAN-n ē gnac'-el, woč' t'e Mariam-ə  
Yesterday London SIRAN-the AUX.3sg go-past.prt, not Mariam-the  
Yesterday Siran-FOC has gone to London, not Mariam

In this example both *yerek* (yesterday) and *London* must be topic, i.e. given information.

- (48) Anna-n as-ac‘ wor Mariam-ə LONDON ē mekn-el, woč‘ t‘e Paris  
 Anna-the say-AOR.3sg that Mariam-the LONDON AUX.3sg leave-past.prt, not Paris  
 Anna said that Mariam left for London-FOC, not for Paris
- (49) Anna-n as-ac‘ wor MARIAM-n ē London mekn-el, woč‘ t‘e Siran-ə  
 Anna-the say-AOR.3sg that MARIAM-the AUX.3sg London leave-past.prt, not Siran-the  
 Anna said that to London Mariam-FOC left for not Siran

In example (48) a focused phrase appears on the left of the embedded clause and the auxiliary is enclitic on it, exactly as example (29) above. In example (49), the focused phrase is preceded by a topic, as in examples (42), (45) and (47) above.

So far, we saw that MEA, at least to a certain extent, resembles German, where the inflected verb appears in second position, contrasting with Italian and English. The difference between German and MEA is that in MEA this order is permitted only when the phrase preceding the auxiliary is focused, whereas no such condition holds in German.<sup>19</sup>

Let’s consider now word order in interrogative clauses. As illustrated above in examples (15) – (18), both in German and in English the auxiliary follows the interrogative phrase, giving rise to *residual V2 phenomena*. This word order is found in MEA as well:

- (50) Ov ē jer tan patuhan-ner-ə kotr-el?  
 who AUX.3sg your house window-pl-the break-past.prt  
 Who broke the windows of your house?
- (51) Wor tla-n ē jer tan patuhan-ner-ə kotr-el?  
 which boy-the AUX.3sg your house window-pl-the break-past.prt  
 Which boy broke the windows of your house?

In the sentences above, the subject interrogative phrase is followed by the auxiliary, both when the interrogative phrase is a simple interrogative item, as in example (50), and when it is a complex

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<sup>19</sup> For an analysis of word order and information structure in German, compared with Italian, see among the others, Frascarelli & Hinterhölzl (2007).

one, as in (51). The same happens in the following cases:<sup>20</sup>

- (52) Inč es Anna-yin patm-el?  
What AUX.2sg Anna-dat tell-past.prt  
What have you told Anna?
- (53) Inč patmut‘yun es Anna-yin patm-el?  
What story AUX.2sg Anna-dat tell-past.prt  
What story have you told Anna?

In these examples, the interrogative phrase is an object and immediately precedes the enclitic auxiliary. Consider now the following examples:

- (54) \* Inč‘ Siran-ə ker-el ē?  
What Siran-the eat-past.prt AUX.3sg
- (55) \* Inč‘ SIRAN-n ē ker-el?  
What SIRAN-the AUX.3sg eat-past.prt?

Examples (54) and (55) are ungrammatical because the interrogative phrase is not followed by the auxiliary.<sup>21</sup> In example (54) it is followed by the subject and in (55) by a focused subject – i.e. a subject immediately followed by the auxiliary. Note that in example (55), the auxiliary is correctly

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<sup>20</sup> Note that other orders are possible as well, such as for instance the following ones:

- i. Inč es patm-el Anna-yin?  
What AUX.2sg tell-past.prt Anna-dat  
What have you told Anna?
- ii. Inč patmut‘yun es patm-el Anna-yin?  
What story AUX.2sg tell-past.prt Anna-dat  
‘What story have you told Anna?’

In these examples the auxiliary and the participle are adjacent, but the auxiliary is cliticized on the interrogative phrase and not on the participle.

<sup>21</sup> For an analysis of interrogative clauses, see also Khanjian (2013).

placed to mark focus, i.e. it is enclitic on *Siran*. We are led to conclude, therefore, that the ungrammaticality of (55) is due to incompatibility of an interrogative phrase with a focus in the same sentence.<sup>22</sup>

Concluding this section, we can say that MEA is not a V2 language across the board, as German, given that verb-final sentences, or in general sentences where the auxiliary is not in second position, are perfectly well formed, as shown by examples (22) and (23) above. However, a V2 order is realized in some cases and precisely when the first phrase is a Focus or an interrogative phrase. Our conclusion is therefore the following:

(56) MEA is a residual V2 language, where V2 is triggered in focused and interrogative phrases.

Note that it has been argued by many scholars that focused phrases and interrogative ones share many properties, both semantically and syntactically. Indeed in MEA they work alike, triggering the same word order.<sup>23</sup>

#### **4. A comparison with Kashmiri**

In the previous sections, we saw that both German and English exhibit V2 word order. In German, main clauses are always V2 – subordinate ones are V2 only when the complementizer *dass* is missing – whereas in English V2 is present in interrogative clauses but not in affirmative ones.<sup>24</sup>

In this respect, MEA is intermediate between the two: it does not instantiate V2 in all main clauses, but, on the other hand, V2 is present in more cases than just interrogative sentences.

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<sup>22</sup> This constraint holds in many languages, such as for instance Italian. See Rizzi (1997) and for a more recent discussion Samek-Lodovici (2015).

<sup>23</sup> A unified analysis of focused and interrogative phrases has been proposed for instance by Rizzi (1997). In Rizzi (2002), and in several subsequent works by generative scholars, this hypothesis has been reconsidered and sharpened to account for additional data. Even if simple focus does not trigger V2 in English, for the purposes of this work we will maintain that focused phrases and interrogative ones are different instantiations of the same general phenomenon.

<sup>24</sup> As pointed out in fn. 5 above, in English V2 is possible also in other cases, beside interrogatives, such as for instance in sentences beginning with a negative operator. These cases have been analyzed as essentially analogous to the interrogative ones.



MEA is not isolated with respect to this cluster of properties. Kashmiri, among oriental Indo-European languages – Kashmiri is an Indo-Aryan language – has been described as exhibiting very similar properties, cf. Manetta (2006) and Bhatt (1999). Hence, it is interesting to compare the two languages with respect to this set of word order phenomena.

The basic word order in Kashmiri is always a V2 one:

- (57) Aslam-an di-ts mohnas kitaab raamini khətrI raath  
 Aslam-ERG give.PST-FSG Mohan-DAT book Ram-DAT for yesterday  
 Aslam gave Mohan a book for Ram yesterday  
 (from Manetta, 2011, ch.2, ex.11a, quoting Wali and Koul, 1997: 89)

In this example the verb appears in second position following the subject. When the verb appears in a periphrastic form, the auxiliary occupies the second position and the main verb appears on the right:

- (58) laRk ch-u dohay skuul gatsh-aan  
 boy AUX-3MS daily school go-IMPV  
 The boy goes to school every day  
 (from Manetta, 2011 exx. 14a, quoting Bhatt, 2004:104)

Interestingly, when a non-subject appears on the left of the verb, it must be interpreted as a focus (examples from Manetta 2011 ch.2, exx.11b-e, quoting Wali and Koul, 1997: 89):

- (59) mohn-as di-ts aslam-an kitaab raam-ini khətrI raath  
 Mohan-DAT give.PST-FSG Aslam-ERG book Ram-DAT for yesterday  
 Aslam gave Mohan-FOC a book for Ram yesterday
- (60) kitaab di-ts aslam-an mohn-as raam-ini khətrI raath  
 book give.PST-PSG Aslam-ERG Mohan-DAT Ram-DAT for yesterday  
 Aslam gave Mohan a book-FOC for Ram yesterday
- (61) raam-ini khətrI di-ts aslam-an mohn-as kitaab raath  
 Ram-DAT for give.PST-FSG Aslam -ERG Mohan-DAT book yesterday  
 Aslam gave Mohan a book for Ram-FOC yesterday

- (62) raath di-ts aslam-an mohn-as kitaab raam-ini khətrɪ  
 yesterday gave Aslam-ERG Mohan-DAT book Ram-ERG for  
 Aslam gave Mohan a book for Ram yesterday-FOC

From these data Manetta concludes that Kashmiri is a V2 language, with special discourse properties, in that in examples (59)-(62) the presence of V2 correlates with a focus interpretation of the preverbal phrase.

Going back to MEA, we can see that this language differs from Kashmiri, in that MEA does not always require a V2 order. As discussed above in fact, sentences such as (22) and (23), where the verb appears at the end of the sentence, are perfectly grammatical. On the other hand, in MEA V2 is strongly connected with a focus interpretation, similarly to Kashmiri. Note also that this property is especially relevant, considering that in the most studied V2 languages, i.e. the Germanic ones, this is not the case. Usually, in these languages the phrase in first position is interpreted as a topic, even when it is a non-subject – cf. Holmberg (2015).

Furthermore, consider the following example in Kashmiri:

- (63) learn' haa-v shill-as nav kitaab raath  
 who.ERG show.PST-FSG Sheila-OAT new book yesterday  
 Who showed a new book to Sheila yesterday?  
 (from Manetta, 2011, ch.2 ex.18, quoting Wall & Koul, 1997: 12)

Example (63) shows that in Kashmiri the inflected verb immediately follows the interrogative phrase. As discussed in section 3, this is also true for MEA and for a residual V2 language like English.

Furthermore, many languages have focalizers or focus particles, such as *even* in English, or *perfino* (even) in Italian. In Kashmiri there is a focus particle, *-ti*, which focalizes the phrase it attaches to. This particle can only appear before the verb (from Manetta, 2006, ch.2 ex. 5, quoting Bhatt 1999):

- (64) bi ti goos gari vakhtas peth  
 I-FOC went home time on  
 I too went home on time

If *-ti* is not in preverbal position, the sentence is ungrammatical (from Manetta, 2006, ch.2 ex. 17,

quoting Bhatt 1999):

- (65) ?\*panin jaay ch-u huun-ti behna broNh goD saaf kar-aan  
self's place AUX-3MSG dog-Foe seat before first clean do-IMPFV  
Even the dog cleans his place before sitting.

In MEA we find a similar focalizer, *nuynisk* (even), which precedes the phrase it focalizes. Consider the following example:

- (66) Nuynisk ANNA-yin ěin erexa-ner-ə hravir-el  
even ANNA-dat AUX.past.3sg child-pl-the invite- past.prt  
The children have invited even Anna-FOC

In example (66) the auxiliary cliticizes on the phrase with *nuynisk* (even) and this is obligatory, as shown by the ungrammaticality of the following example:<sup>25</sup>

- (67) \*Nuynisk Anna-yin erexa-ner-ə hravir-el ěin  
even Anna-dat child-pl-the invite- past.prt AUX.past.3sg  
the children have invited even Anna

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<sup>25</sup> Note that other orders are possible as well. Consider the following example:

- i. Nuynisk ANNA-yin ěin hravir-el erexa-ner-ə  
even ANNA-dat AUX.past.3sg invite- past.prt child-pl-the  
'The children have invited even Anna-FOC'

In this sentence the auxiliary is cliticized on the phrase with *even*, but the object follows the participle, a possibility which is often available in MEA (see sect. 3 above). Consider now the following case:

- ii. Erex-a-ner-ə hravir-el ěin nuynisk Anna-yin  
Child-pl-the invite- past.prt AUX.past.3sg even Anna-dat  
The children have invited even Anna

In this sentence *nuynisk Anna-yin* (even Anna) appears at the end of the sentence. This might point to the existence in MEA of an additional focus position not on the left of the sentence. We are addressing this issue in further research.

In (67), the auxiliary cliticizes on the participle and the sentence is ungrammatical. Note that this example is particularly relevant because, as shown in section 3, the sentence final position of the auxiliary is otherwise perfectly acceptable. The order in (67) is ungrammatical due to the presence of the focalizer, showing again that focus is the trigger of V2 in MEA and (to a certain extent) in Kashmiri as well. Consider now the following sentence:

- (68) Erexa-ner-ə nuynisk ANNA-yin ēin hravir-el  
 Child-pl-the even ANNA-dat AUX.past.3sg invite- past.prt  
 ‘The children have invited even Anna-FOC’

In this sentence the phrase containing *nuynisk* precedes the auxiliary, which on its turn is preceded by the phrase *erexa-ner-ə* (the children). The only possible interpretation for this sentence is that *the children* is a topic – i.e. a phrase previously mentioned in the discourse – and certainly not as a focus. These considerations are coherent with our discussion so far.

We can conclude this section by pointing out that the similarities between MEA and Kashmiri show that the information structure, in particular focus, is an important component for determining word order.

## Conclusions

In this work we proposed that MEA is a residual V2 language, i.e. a language which instantiates V2 only in certain cases. We proposed that the trigger for V2 in MEA is provided by focus properties – realized both as focused phrases, or as interrogative ones. We also showed that in English, V2 is triggered only by interrogatives, whereas in Kashmiri it is triggered both by interrogative phrases and focused ones. However, Kashmiri is like German, in that it must have a V2 word order in all sentences – the subject preceding the inflected verb being an exception to the focus rule. MEA is therefore an intermediate case: it is like English in that it requires V2 only in certain cases, and it is like Kashmiri, as far as the triggers for V2 are concerned.

Theoretically this is an important result, because it shows that information structure, in particular focus, is an important component of syntax, contributing to define word order in an important way. There are several issues connected to this questions that are worth investigating in future research. Among the many ones coming to mind, let us mention the following ones. The description and analysis of focus phenomena must be sharpened. In particular, the relationship with intonation facts must be taken into account to provide a finer grained explanation. The properties of the topicalized

phrases that are allowed to precede the focused one must be considered with more details. Furthermore, the relation between word order and indefinites must also be taken into account. Finally, the diachronic issues should also be addressed: what about Grabar? Is word order in MEA an innovation, or does MEA simply maintain properties already observed in previous stages of the language? We are presently addressing some of these issues and we hope that soon we will be able to discuss with scientific community further results.

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