

The Correlation between Negative Strategies and Basic Word Order

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A thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfillment of the requirements of the degree of

MASTER OF ARTS

Department of Linguistics
University of Manitoba
Winnipeg

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Abstract

Based on two typological frameworks (Dahl, 1979 and Miestamo, 2007), I explore the various strategies used to negate declarative verbal main clauses (standard negation) in 28 languages in order to investigate the correlation between them and basic word order. The 28 languages are divided into three groups according to their basic word order as follows: 11 SOV, 10 SVO and 7 VSO. As much as possible, I have included languages from different language families and different geographical areas in order to eliminate the effect of genetic relationships and borrowings. The results suggest that negative strategies are probably morphological, where the negator is an affix, in SOV languages and frequently syntactic, where the negator is an independent morpheme, in SVO and VSO languages. I also show that symmetric negation, where no structural differences are observed between affirmatives and negatives other than the negative marker (s), is the most common type cross-linguistically.

Acknowledgements

First and foremost, I would like to start by saying “Thank You Allah”. Thank You for everything You have given me. Thank You for giving me the ability and the strength to be able to think, search and analyze in order to finish my thesis. Thank You for being always with me in both my difficult and happy times.

I would like to express my sincere appreciation to my advisor Dr. Lorna MacDonald for her support, encouragement and guidance during my study in the University of Manitoba. I would also like to express my deepest gratitude for her patience and kindness.

In addition, I would like to extend my thanks to every professor and every graduate student in the Department of Linguistics for creating this great environment for students.

Special thanks to my mother “Amnah Alansari” for making me always feel special, to my wife “Maram” for being always patient and supportive and to my lovely son “Tameem” for giving me the pleasure of being a father.

I also would like to thank my best friends “Osama Alsuhaumi, Osama Algamdi, Yahya Aljohani, Eid Albulawi, Mutasim Al-Deaibes and Omar Alhazmi” for their support, help and for sharing their unforgettable memories with me.

Finally, I thank my government for financing my study here in Canada. I also thank Canadian people for making Canada such a wonderful place for international students.

This thesis is dedicated to the soul of my father “Muqbil Alluhaybi”. I know you would be proud of me now.

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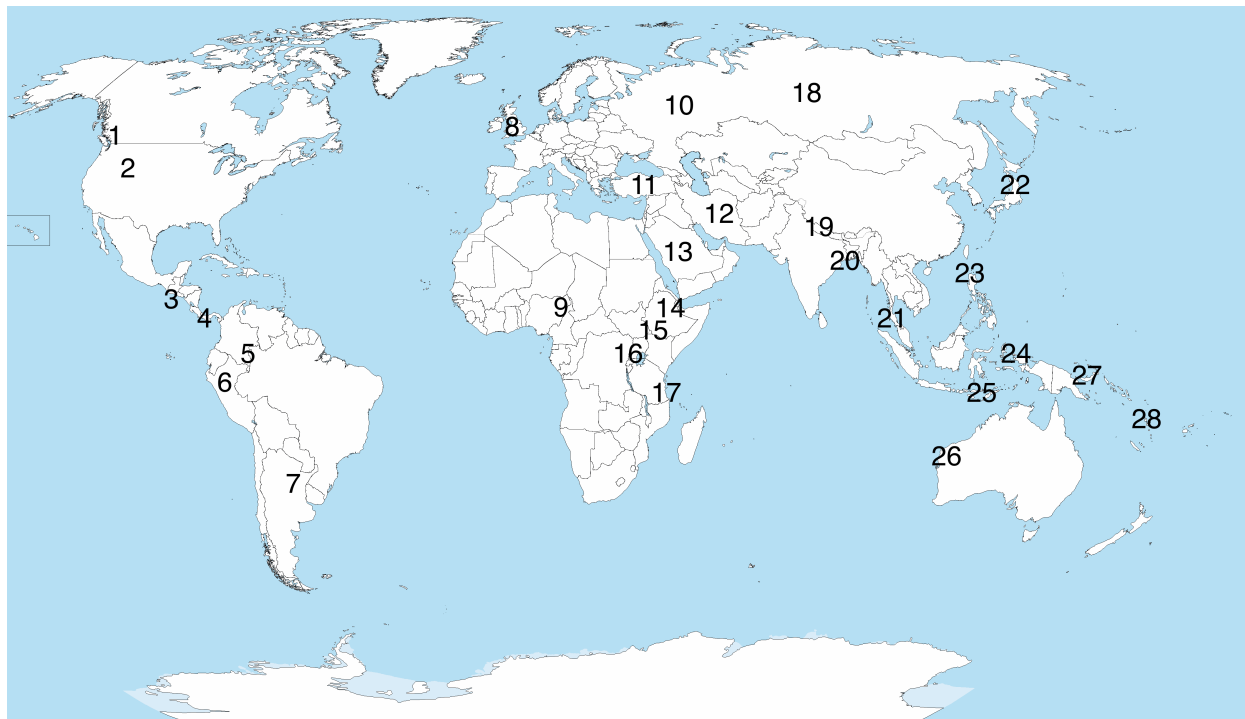
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Abbreviation

1	First	ECXL	Exclusive
2	Second	ERG	Ergative
3	Third	EVID	Evidential
ABS	Absolutive	F	Feminine
AC	Active	FUT	Future
ACC	Accusative	GEN	Genitive
ADEL	Adelative ¹	GIV	Previously giving information
ASSER	Assertive	H	Honorific
ASC	Associative	HAB	Habitual
AUX	Auxiliary	IMPF	Imperfective
AV	Actor voice	INCL	Inclusive
COM	Completive aspect	IND	Indicative
CON	Contingent event	INDF	Indefinite
CONT	Continuative aspect	INFL	Inflectional morpheme
COP	Copula verb	IRL	Irrealis
DAT	Dative	Loc	Location
DEM	Demonstrative	M	Masculine
DNR	Deictic nominalizer	NEG	Negative
DR	Directional	NH	Non honorific
DUL	Dual	NHYP	Non hypothetical
DUR	Durative	NOM	Nominative
		NON3	Non third

¹ Unfortunately, Miestamo (2007) does not explain what he means by “Adelative”.

NPST	Non past	VBLZ	Verbalizer
NZR	Nominalizer		
OBJ	Object		
OBL	Oblique		
PERF	Perfective		
PL	Plural		
PNCT	Punctual		
POL	Polite		
POSS	Possessive		
POT	Potential		
PREP	Preposition		
PRES	Present		
PRG	Progressive		
PROB	Probably		
PST	Past		
QES	Question marker		
RL	Realis		
SG	Singular		
SO	Point of view of source		
SUBJ	SUBJ		
TOP	Topic		
TRANS	Transitive verb		
UP	Verbal extension indicating movement upward		

Map 1: Languages included in the study²

- | | | | |
|---------------------------------|------------------|---------------------|-------------|
| 1- Musqueam | 10- Mansi | 19- Kham | 28- Neve'ei |
| 2- Shoshoni | 11- Turkish | 20- Maithili | |
| 3- Mam | 12- Persia | 21- Jahai | |
| 4- San Dionisio Ocotepc Zapotec | 13- Saudi Arabic | 22- Japanese | |
| 5- Desano | 14- Amharic | 23- Dupanangan Agta | |
| 6- Kokama-Kokamilla | 15- Dime | 24- Moskona | |
| 7- Mocovi | 16- Lango | 25- Tetun Dili | |
| 8- Welsh | 17- Swahili | 26- Nhanda | |
| 9- Hdi | 18- Russian | 27- Tauya | |

² The original map is created by Veranda (2006), found on Wikipedia.

1. Introduction

Every language in the world has at least one strategy to express negation (Dahl, 1979). Negation can be sentential, where the whole clause or the sentence is within the scope of negation, or constituent, where the target of the negation is a particular constituent in the clause. Both types are shown in examples (1) and (2), respectively (the scope of negation is italicized).

(1) *He did not eat.*

(2) I want water not *milk.*

Sentential negation is divided further into standard and non-standard based on the type of the clause (Miestamo, 2007). Standard negation (henceforth SN) refers to negating declarative verbal main clauses whereas non-standard negation refers to negating other types of clauses such as imperatives, nonverbal or existential clauses.

1.1. Typology of standard negation

Dahl (1979) proposes the first SN classification. Based on a sample of 247 languages, he finds SN is formed either morphologically (found in 108 languages) or syntactically (observed in 139 languages). In morphological (synthetic) type, negation is done by affixation, namely prefixes, suffixes or circumfixes.³ Negative infixes have not yet been attested. Consider the following examples (Miestamo, 2007):

(3) Latvian (Baltic language / Indo-European family)

a. Tev-s	strada	plava
father-NOM	work.3.SG	meadow.Loc

“Father is working in the meadow”

³ Negative circumfixes are also called double or discontinuous negative markers (Miestamo, 2007).

b. Tev-s ne-strada
 father-NOM NEG-work.3.SG

“Father is not working”

(4) Lezgian (Lezgian language / Nakh-Daghestanian family)

a. Xürünwi-jri ada-waj meslat-ar qaču-zwa-
 villager-pl (ERG) he-ADEL advice-PL take-IMPF

“The villagers take advice from him”

b. Xürünwi-jri ada-waj meslat-ar qaču-zwa-č
 villager-pl (ERG) he-ADEL advice-PL take-IMPF-NEG

“The villagers do not take advice from him”

(5) Chukchi (Northern Chukotko-Kamchatkan language / Chukotko-Kamchatkan family)

a. Cejwə-rkən
 go-DUR

“(S)he goes”

b. A-nto-ka
 NEG-go.out-NEG

“(S)he does not go out”

In some languages, the negative marker is a clitic. Consider the following example from Mocovi (Grondona, 1998) where the negator is a proclitic and attached to the verb:

(6) Mocovi / Guaicuruan family

a. Ø=aʔde:n-i
 2AC=know-2.SG.F

“You (SG.F) know”

- b. Qam se=s=aʔde:n-ag
 but NEG=3AC=know-1.PL

“But we do not know”

In this paper, I classify the negative strategy in languages like Mocovi as morphological for two reasons. First, clitics cannot stand as independent morphemes; they must be attached, like affixes, to free morphemes. Second, based on the notion of “grammaticalization”, an independent morpheme becomes a clitic and eventually ends up to be an affix over a certain period of time (Hopper, 2003). Accordingly, clitics are undergoing the process and eventually they become affixes. Thus, it seems appropriate to classify them with affixes.

In syntactic (analytic) negation, negation is achieved through the use of an uninflected particle (the most common analytical negation; found in 99 languages), an auxiliary verb or a dummy auxiliary construction where negation is expressed by a negative marker and a dummy auxiliary verb. As examples, consider the following:

(7) English (Germanic / Indo-European family)

a. John is not writing.

b. John does not write.

(8) Finnish (Finnic language / Uralic family)⁴

Affirmative

a. Luen

read.PRES.1.SG

“I read”

Negative

b. En lue

NEG.1.SG read.PRES

“I do not read”

⁴ The original source has no gloss for this example; thus, I provide it.

c. Luet	d. Et	lue
read.PRES.2.SG	NEG.2.SG	read.PRES
“Thou read” ⁵	“Thou does not read”	

As in (7), English is an example of both: uninflected negative particle and dummy auxiliary construction. In English, SN can be accomplished by the negative particle *not* as in (7.a) as well as by the dummy auxiliary construction (Do + NOT) as in (7.b). In Finnish, by contrast, the negator is an auxiliary (Dahl, 1979). In Finnish, the negative marker is inflected for some categories, which typically appear on finite verbs such as person in this case. Note in Finnish *En* and *Et* can be called “portmanteau morphemes” where a single morpheme realizes two grammatical categories (Givon, 1984).

It is worth noting in this context that double or discontinuous negative markers do not occur only in morphological negation; rather, they can also appear in syntactic negation. The following example from French illustrates how negation is expressed by two negative particles which occur before and after the verb “sing” (Miestamo, 2007):

(9) French (Romance language / Indo-European family)

Ie	ne	chante	pas
1SG	NEG	sing	NEG
“I do not sing”			

Miestamo (2006) proposes another classification of SN. In his study of 297 languages, Miestamo classifies standard negation into symmetric and asymmetric based on the differences found between negative clauses and their corresponding affirmative counterparts. The differences can be recognized from two points of view: construction and paradigm as follows: First, a negative construction might be symmetric or asymmetric. In symmetric negative

⁵ “Thou” is a pronoun that used to address second person singular.

constructions, the only recognizable difference between a negative construction and its corresponding affirmative is the presence of the negative marker (s) (Auwera & Miestamo, 2006). Latvian (3) and Lezgian (4) above are examples of this type. In asymmetric constructions, further differences can be observed; this is the case in Chukchi (5) where verbs in negatives do not inflect for tense or aspect, and in Finnish (8) where person in negatives is marked on the negative auxiliary instead of the main verb. In the following examples, Auwera and Miestamo (2006) provide affirmative clauses and their negative counterparts from Moseetèn and Evenki to illustrate both symmetric and asymmetric negative constructions, respectively:

(10) Moseetèn (Moseetenan family)

- a. Yae chhi-ye-‘
 I know-VBLZ-3F.OBJ
 “I know her/it”
- b. Jam yae chhi-ye-‘
 NEG I know-VBLZ-3F.OBJ
 “I don’t know her/it”

(11) Evenki (Tungusic language / Altaic family)

- a. Nuḡan min-du purta-va bu-che-n
 he 1sg-DAT knife-ACC give-PST-3sg
 “He gave me the knife”
- b. Nuḡan min-du purta-va e-che-n bu-re
 he 1sg-DAT knife-ACC NEG-PST-3sg give-PTCP
 “He didn’t give me the knife”

Note in Moseetèn the affirmative clause (a) can be derived by eliminating the negative marker in (b). In Evenki, in contrast, further changes must be made; the negator is an auxiliary that inflects for person and tense instead of the main verb “give”.⁶ Moreover, the verb “give” in the negative clause is marked as a participle.

It should be borne in mind that in some languages, the negative construction is symmetric in some situations and asymmetric in others. This is the case in English as the following examples show:

(12) English (Germanic language / Indo-European language)

- a. John is writing a letter.
- b. John is not writing a letter.
- c. John wrote a letter.
- d. John did not write a letter.

Note the only difference between the affirmative in (a) and the negative in (b) is the negator “not”; therefore, the negative construction is symmetric in this example. Between (d) and (c), on the other hand, two structural differences can be observed between the affirmative and the negative clause, namely the negative particle “not” and the auxiliary verb “Do”; thus, the negative construction is asymmetric.

Second, similarly to the construction, the negative paradigm can be classified as symmetric or asymmetric. In symmetric paradigms, the members of a paradigm used in affirmatives and negatives exhibit “one-to-one correspondence”. In other words, every clause can occur as an affirmative or a negative as the following examples from Dutch show (Miestamo, 2007):

⁶ See section (4.2) for the relationship between negative auxiliaries and asymmetric negative constructions.

(13) Dutch (Germanic language / Indo-European family)⁷

1. SG	Affirmative	Negative
<i>Present</i>	Ik zing 1.sg sing.PRES “I sing”	Ik zing niet 1.sg sing.PRES NEG “I do not sing”
<i>Past</i>	Ik zong 1.sg sing.PST “I sang”	Ik zong niet 1.sg sing.PST NEG “I did not sing”
<i>Perfect</i>	Ik heb gezongen 1.sg PERF sing “I had sung”	Ik heb niet gezongen 1.sg PERF NEG sing “I had not sing”

The one-to-one correspondence is not found in asymmetric paradigms. Meithei is an example of this type. In Meithei, affirmatives can be either non-hypothetical or assertive whereas negatives can be assertive only. In Meithei, non-hypothetical is used to convey “mild assertion; the speaker does not support the statement by providing evidence for it, but simply presents it as fact” while assertive is used to indicate strong assertion (Chelliah, 1997:132). Consider the following examples:

(14) Meithei (Sino-Tibetan language)

Affirmative	Non-hypothetical	Assertive
	a. Təw-I do-NHYP “She does”	b. Təw-e do-ASSER “She has”

⁷ Again, I provide the gloss for this example since the original source does not provide it.

Negative**Assertive**

- c. əy fotostat təw-tə-e
 I Photostat do-NEG-ASSER
 “I haven’t made copies”

In this research, I only consider the negative construction and not the paradigm. That is, in every language I consider for this study the negative paradigm is symmetric. It is worth mentioning that even in Miestamo’s study asymmetric negative paradigms are uncommon; however, he does not provide a specific number for their occurrence because of his methodology. In Miestamo’s research, he classifies negative strategies into three types: Type Sym when there is no asymmetry, neither constructionally nor paradigmatically, Type Asy when negation is always asymmetric, and Type SymAsy when there is symmetry as well as asymmetry in the same language (Miestamo, 2013). Although Miestamo states that symmetry and asymmetry are perceived from the two points of view (construction and paradigm), he, in fact, classifies languages based on the constructional point of view only. For example, the negative construction in Finnish is asymmetric but the paradigm is symmetric. As a result negation in this language should be classified as Type SymAsy; there is symmetry and asymmetry in negation within the same language. In other words, negation in Finnish is asymmetric from the constructional point of view and symmetric from the paradigmatic viewpoint. However, Miestamo categorizes negation in Finnish as Type Asy. As he puts it, a language belongs to Type Asy if its negative construction is always asymmetric. “The paradigm can of course be symmetric or more or less asymmetric, but as the negative construction is always asymmetric, there are no instances of symmetric standard negation” (Miestamo, 2013). Indeed, the constructional point view is the crucial factor in his study.

According to Miestamo (2013), the division of symmetric versus asymmetric is based on analogy. Languages which form negatives symmetrically are language internally analogous. In these languages, negative clauses copy the linguistic structure of their corresponding affirmatives; thus, they are internally analogous to their affirmatives. Such a phenomenon is motivated by the pressure for cohesion in the system of these languages. This analogy, however, is not found in languages with asymmetric negative strategy.

Finally, it should be borne in mind that the negative strategy might change over time due to grammaticalization where an independent morpheme becomes a clitic and then an affix over a certain period of time (Hopper, 2003). Accordingly, negation in a language might start originally as syntactic (expressed by an independent morpheme) and after a while becomes morphological (expressed by an affix). Not only the negative strategy, but also negators might be replaced. Based on negation in various languages, Jespersen (1917) observes that the negative morpheme gets weakened after a certain period of time and then found insufficient; consequently, it is supported by another word. Over time, the new word will be considered as the proper negative morpheme and used as the only negator in the clause. Eventually the new negator will go through the same cycle again. The cycle is known as “Jespersen’s cycle” which can be illustrated by the following examples from old, classic and contemporary French (Larrivee, 2010):

(15) Old French

Jeo	ne	dis
1SG	NEG	say
“I do not say”		

(16) Classic French

Je	ne	dis	pas
1SG	NEG	say	NEG

“I do not say”

(17) Contemporary French

Je	dis	pas
1SG	say	NEG

“I do not say”

Note that in (15), *ne* is the original negative morpheme in French. It has been supported by *pas* as in (16) which has become the only negative marker as in (17).

1.2. Typology of basic word order

Basic word order has received a considerable attention in the literature because a considerable number of characteristics can be predictable based on it (Greenberg, 1966; Comrie, 1989; Dryer, 1991). Studies on word order are mostly, if not always, statistical. That is, a pattern is correlated with a specific basic word order if such a correlation has been observed in a large number of languages.

Greenberg (1966) is one of the first typologists to draw our attention to the significance of basic word order. In his study, he considers 30 languages and classifies them based on the order of subject, object and verb into three types: SOV, SVO and VSO. The other logically possible orders (OSV, VOS, OVS) are excluded in his work because they are rare cross-linguistically. In his study, Greenberg proposes 45 implicational universals. Some of these universals are proposed as absolute universals where no exceptions have been observed, and others are tendencies where some exceptions are found. However, all of them take the following form: if X

is found, we always or probably find Y. The converse (Y entails X) is not necessarily valid. For example, VSO languages are always prepositional (Universal 3), but it is not true that all prepositional languages are VSO. His universals can be divided into two categories: syntactic and morphological. Syntactic universals address the order of independent morphemes, i.e., if pronominal objects follow the verb, nominal objects follow it as well (Universal 25). Morphological universals, in contrast, consider inflections and derivations, i.e., if a language has a circumfix, it must have either prefixes or suffixes in its system (Universal 26).

Lehmann (1973) argues that languages should be classified into two types only: OV and VO. He observes that “sentence qualifiers” are placed after the verb in consistent OV languages whereas in consistent VO languages they are placed before the verb. In Lehmann’s study, sentence qualifiers are elements that modify the entire proposition in the clause, i.e., question markers and negative markers. According to Lehman (1973), in both OV and VO languages the order of interrogative markers, negators and markers for potentiality are placed similarly with regard to the sentence boundary. In other words, in OV languages, the potential marker is placed immediately after the verb followed by the negative marker whereas the interrogative marker is the final morpheme in the clause. In VO languages, the same order occurs but in a converse way. That is, the interrogative marker occurs initially followed by the negative marker while the potential marker is placed as the closest to the verb. The order in OV and VO languages can be summarized as follows:

OV languages: Verb + POT + NEG + QES

VO languages: QES + NEG + POT + Verb

Based on the previous result, Lehmann suggests that “VO languages develop toward an isolating structure, as has English” whereas “there is no tendency toward agglutinative

morphology in VO languages as there is in OV languages” (Lehmann, 1973:64). Lehmann also observes some phonological properties regarding basic word order. As he puts it, syllables in OV languages tend to end in a vowel whereas they tend to end in a consonant in VO languages. Moreover, vowel harmony can be considered as a phonological characteristic among OV languages.

Agreeing with Lehmann, Dryer (1991) supports the two ways classification (OV vs VO). To support his proposal, he provides three arguments based on data from 603 languages. Dryer classifies languages into three types: V-initial languages (VSO and VOS), V-final languages (SOV and OSV) and SVO languages. The reason for such classification is to see whether SVO languages have unique characteristics or they are similar to V-initial languages.

Dryer’s first argument is against Crime’s (1989) proposal. According to Crime (1989), we can with great reliability predict exceptionless universals for SOV languages, i.e. they are always postpositional; and for VSO languages, i.e., they are always prepositional but not for SVO languages. In other words, SVO languages are intermediate between them; some of them are postpositional and others are prepositional. Thus, they should be considered as a different category. Dryer (1991), however, argues that not all SOV languages are postpositional as some of them are not. He discovers three prepositional V-final languages in Africa. Moreover, he proposes some exceptionless universals for SVO languages. For example, SVO languages always place clause complementizer initially in the clause and they do not have head-internal relative clauses.

The second argument is shared properties. Based on a sample of 603 languages, Dryer observes that V-initial and SVO languages tend to behave in a similar way which is different from V-final languages. For example, the chance for a V-final language to be postpositional is 96

% whereas the same chance is 14 % for an SVO language and only 9 % for a V-initial language. He also finds 43 % of V-final languages place relative clauses before nouns. On the other hand, no V-initial language with such a phenomenon is attested, and only one SVO language does it, namely Chinese. Another example is that in 70 % of V-final languages “adverbial subordinators” (words like “when” and “because”) follow the clause whereas only 6 % of V-initial and 6 % of SVO languages have such a placement. As a result, one can conclude that OV languages are probably postpositional, might place relative clauses before nouns and frequently place adverbial subordinators after the clause. VO languages, on the other hand, are commonly prepositional, do not place relative clauses before nouns and mostly place adverbial subordinators before the clause. Indeed, SVO languages are very different from V-final languages but similar to V-initial languages.

The last argument Dryer provides is against “Cross-Category Harmony” (CCH), a principle Hawkins (1982) proposed. According to CCH, V-final languages frequently place all modifiers before nouns whereas V-initial languages tend to place them after nouns. SVO languages, however, are intermediate; that is, they place some modifiers before and some after the noun. To test the validity of this principle, Dryer considers the placement of two modifiers with respect to the noun: adjective and genitive. As indicated in Table (1) below, Dryer’s findings do not support CCH. That is, the most common phenomenon in SVO languages is to place both modifiers before the noun not one before and one after (found in 16 languages). On the other hand, both V-final languages and V-initial languages tend to place one modifier before and one after.⁸

⁸ Dryer does not specify which modifier (adjective or genitive) is placed before and which one is after. I assume, though, it is not consistent; that is, in some languages adjectives follow the noun while genitives precede them, and in others it is vice versa.

Table (1): The placement of adjective and genitives

	V-Final	V-Initial	SVO
ADJ & GEN before NOUN	45	3	8
ADJ & GEN after NOUN	9	16	29
One before & One after	53	19	16

All in all, initially basic word order has been perceived on the basis of the order of subject, object and verb in a declarative clause as in Greenberg (1966). Since then, several studies suggest that the place of subject is irrelevant and the only parameter is the order of the object and the verb (Lehmann, 1973; Dryer, 1991). However, although a considerable number of characteristics have been correlated with basic word order, strategies used to express negation have not.

2. Methodology and Research questions

To my knowledge, no research has been done to investigate whether a certain basic word order would entail a particular negative strategy. Dahl (1979), however, has shown some relationships between word order and the position of negative elements by proposing the following: 1) negative particles are usually placed pre-verbally regardless of basic word order, 2) negative auxiliaries, like other auxiliaries (Greenberg, 1966), are commonly post-verbal in verb-final languages, and pre-verbal in verb-initial and verb second languages. Lehmann (1973) also observes some relationships regarding the placement of negative elements. Negative elements are placed before verbs in VO languages and after verbs in OV languages (Lehamann, 1973). However, no one of them tries to correlate negative strategies (morphological or syntactic) with basic word order; they address the placement of negators only.

In the light of Dahl and Miestamo's frameworks, this study investigates whether there is a correlation between negative strategies and basic word order. Simply speaking, the aim here is to seek an answer for the following question: *Would a specific word order predict a certain negative strategy?* To this end, I consider standard negation in 28 languages (See map 1). I divide the languages into three groups on the basis of the order of subject, object and verb in a declarative clause. I consider subject placement to see whether it is relevant or not. If the subject is relevant, I expect SVO languages to behave differently from SOV and VSO languages. If it is not, then I expect SVO languages to behave similarly to VSO languages since both of them can be classified as VO languages.

Languages included in the study are: Group (1) SOV (Japanese, Turkish, Amharic, Persian, Dime, Desano, Kham, Tauya, Mansi, Maithili and Western Shoshoni), Group (2) SVO (Swahili, Mocovi, Neve'ei, Moskona, Jahai, English, Russian, Lango, Tetun Dili and Kokama-Kokamilla),

Group (3) VSO languages (San Dionisio Ocotepc Zapotec, Saudi Arabic, Welsh, Hdi, Musqueam, Dupaninan Agta and Mam). Each group is explored in a separate section followed by a discussion and a summary table. These languages were chosen based on the available sources and as much as possible I have included languages, in each group, from different language families and different geographical areas in order to control for the effect of genetic relationships and borrowings (See Table 2 below for their genetic affiliation).

Table (2): Languages and their genetic affiliation

Family	Branch	Branch	Language
Japanese (Isolated)			Japanese (SOV)
Altaic	Turkic		Turkish (SOV)
Afro-Asiatic	Semitic		Amharic (SOV) Saudi Arabic (VSO)
	Omotic	South-Omotic	Dime (SOV)
	Chadic	Biu-Mandara	Hdi (VSO)
Indo-European	Iranian		Persian (SOV)
	Indo-Aryan		Maithili (SOV)
	Germanic		English (SVO)
	Slavic		Russian (SVO)
	Celtic		Welsh (VSO)
Tucanoan			Desano (SOV)
Sino-Tibetan	Tibeto-Burman		Kham (SOV)
Trans New Guinea	Madang	Rai Coast	Tauya (SOV)
Uralic	Ugric		Northern Mansi (SOV)
Uto-Aztecan	Numic		Western Shoshoni (SOV)
Niger-Congo	Bantoid		Swahili (SVO)
Guaicuruan			Mocovi (SVO)
Austronesian	Oceanic		Neve'ei (SVO)
	Malayo-Polynesian		Tetun Dili (SVO)
	Philippine		Dupaningan Agta (VSO)
East Bird's Head			Moskona (SVO)
Mon-Khmer	Aslian	Northern Aslian	Jahai (SVO)
Nilo-Saharan	Nilotic		Lango (SVO)
Tupian	Tupi-Guarani		Kokama-Kokamilla (SVO)
Otomanguean			San Dionisio Ocotepec (VSO)
Salishan			Musqueam (VSO)
Mayan	Mamean		Mam (VSO)

In this paper, VOS, OSV and OVS languages are not considered due to their rarity as well as their limited available resources. Free word order languages are also excluded since the aim of the study is to find a correlation between negation and rigid word order. As a result, Australian languages are not considered; they are usually free word order languages. However, I assume that negation in such languages is expressed by one of the negative strategies described above. Consider the following examples from Nhanda, one of the Pama-Nyungan languages spoken on the coastal strip of Western Australia (Blevins, 2001). Negation in this language is syntactic since the negator is a particle and symmetric since it is accomplished by the addition of the negative marker only:

(18) Nhanda – Pama-Nyungan language / an aboriginal language of western Australia

Affirmative

Induga	ngaya	arliba-ndha	nyini-nha	wur'a
tomorrow	1.SG	lend-FUT	2.SG-ACC	money

“Tomorrow I will lend you some money”

Negative

Ngayi	malya	athu-ndha
1.SG	NEG	cook-FUT

“I will not cook it”

In my thesis, I accept the analyses presented in my sources. For example, if the source categorizes the negative morpheme as a particle, I consider it a particle. I also copy every example faithfully from its original source and make no changes unless necessary, and in this case I indicate the change and the reason in a footnote.

3. Data analysis

3.1 SOV Languages

3.1.1 Japanese – Japanese family (Nyberg, 2012)

Japanese is a language isolate that is primarily spoken in Japan as the official language.

SN in Japanese is accomplished morphologically by the negative suffix *-na* affixed to the verb stem as illustrated by the following examples:

(19) Kodomo ga ringo o tabe-na-katta
 child Nom apple Acc eat-NEG-PST

“The child did not eat an apple”

(20) Kak-*a*-na-i
 write-INFL-NEG-NPST

“I/you do not write”

(21) Kak-*a*-na-katta
 write-INFL-NEG-PST

“I/you did not write”

Note that in (19) the negative suffix is attached directly to the verb *tabe* “eat” because the verb ends in a vowel. In (20) and (21), on the other hand, the verb *kak* is a consonant-final verb; thus, there is *a* between the verb *kak* “write” and the negative marker *na*.⁹ However, there are a few exceptions to the previous rule. For example, negating the verb *kuru* “to go” involves some phonological changes; *kuru* becomes *ko* in negative clauses as in (22).

⁹ This might be an epenthetic vowel. Nyberg (2012) calls it an “inflectional morpheme”, but he is not certain about its function.

(22) Ko-na-katta

come-NEG-PST

“I/you did not come”

The negative pattern is different if the verb is inflected for an aspect (e.g. progressive). In this case, the inflected verb is followed by an auxiliary which then takes both the negative suffix and tense inflections as the following example shows:

(23) Kodomo ga ringo o tabe-te i-na-i

child Nom apple Acc eat-PRG AUX-NEG-NPST

“The child is not eating an apple”

The suffix *-en* is another Japanese negator. It appears only with polite forms as illustrated by the following example:

(24) Kodomo ga ringo o tabe-mas-en

child Nom apple Acc eat-POL-NEG

“The child does not eat an apple”

In order to decide whether the Japanese negative construction is symmetric or asymmetric, compare the following affirmatives to their corresponding negatives:

(25) a. Kodomo ga ringo o tabe-ru

child Nom apple Acc eat-NPST

“The child eats an apple”

b. Kodomo ga ringo o tabe-na-i

child Nom apple Acc eat-NEG-NPST

“The child does not eat an apple”

(26) a. Kodomo ga ringo o tabe-te i-ta
 child Nom apple Acc eat-PRG AUX-PST

“The child was eating an apple”

b. Kodomo ga ringo o tabe-te i-na-katta
 child Nom apple Acc eat-PRG AUX-NEG-PST

“The child was not eating an apple”

Note that there is a major difference between affirmatives and negatives aside from the presence of the negative marker. In (25a) and (26a), non-past and past are encoded by *-ru* and *-ta*, respectively, whereas in (25b) and (26b), tense is signaled by different suffixes, namely *-i* and *katta*. Therefore, the negative construction in Japanese is asymmetric.

Table (3): SN in Japanese

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction				✓
Negative marker	Suffix [-na] or [-en]			
Place	Verb + (POL) + NEG + Tense			

3.1.2 Turkish – Turkic language / Altaic family (Schaaik, 1994)

Turkish is a member of the Turkic languages, a subgroup of the Altaic language family. It is mainly spoken in Turkey as the official language of the country.

The negative suffix in Turkish is *-mV*. The vowel *V* is subject to the vowel harmony rules in Turkish. Consequently, the suffix is presented as *-mV* where *V* indicates a changeable vowel, either *e* or *a*.¹⁰ Consider the following examples:

(27) Gel-me-yecek

come-NEG-FUT

“(S)he will not come”

(28) Çalış-ma-yacak

work-NEG-FUT

“(S)he will not work”

(29) Çalış-ma-yacak-ti

work-NEG-FUT-PST

“(S)he would not work”

In negating present continuous clauses, the changeable vowel has four possibilities instead of two. It can be *ü*, *i*, *u* or *ı*.¹¹ The four possibilities are exemplified by the following examples, respectively:

(30) Dön-mü-yor

return-NEG-PRG

“(S)he is not returning”

¹⁰ The choice between them is governed by the preceding vowel; that is, if the last vowel in the verb stem is front (e, ɪ, ö, ü), the negative suffix will be *-me*, and if the last vowel in the verb stem is back (a, ɪ, o, u), the negative suffix will be *-ma*. It is worth noting that the future suffix *-yEcek* is also subject to the same rules.

¹¹ Unlike negating past and future clauses where only front-back parameter determines the vowel in the negative suffix, rounded-unrounded also plays a role here as follows: front rounded vowels (ö, ü) trigger *-mü*; after front unrounded vowels (e, i) comes *-mi*; after back rounded vowels (o, u), we get *-mu*; finally we have *-mı* after back unrounded vowels (a, ɪ).

(31) Gel-mi-yor

come-NEG-PRG

“(S)he is not coming”

(32) Dur-mu-yor

stop-NEG-PRG

“(S)he is not stopping”

(33) Al-mı-yor

talk-NEG-PRG

“(S)he is not talking”

Negating “possibility of potential” is expressed differently in Turkish; instead of *-mV*, the suffix *-(y)EmE* is attached to the verb stem as in (34).

(34) Anla-yama-yacak

understand-NEG.POT-FUT

“(S)he will not be able to understand (it)”

The negative construction in Turkish is symmetric. This can be observed by comparing the following affirmative and negative clause. Note that no further differences can be recognized between them other than the negative marker.

(35) Ali kaders-i-ne bir kitapver-di

Ali brother-his-DAT book give-PST

“Ali gave a book to his brother”

(36) Gel-me-di

come-NEG-PST

“(S)he did not come”

Table (4): SN in Turkish

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Suffix [-mV] or [-(y)EmE]			
Place	Verb + NEG + Tense			

3.1.3 Amharic – Semitic language / Afro-Asiatic family (Leslau, 1995)¹²

Amharic is one of the Semitic languages, a branch of the Afro-Asiatic language family. It is spoken in Ethiopia. As a Semitic language, Amharic uses “root and pattern morphology” for much of its inflection as well as derivation, but not for negation. It is a Semitic phenomenon *par excellence* (For more details see Aronoff & Fuderman, 2011).

SN in Amharic is done discontinuously by prefixing *al-* and suffixing *-(ə)mm* to the verb stem. This negative circumfix has another allomorph, namely *a- . . . -(ə)mm*. The choice between them is determined by tense as follows:

First, to negate past clauses, the negative circumfix *al- . . . -(ə)mm* is used. The vowel *-ə* is preserved if the preceding sound is a consonant and eliminated when it is a vowel. Both cases are exemplified in the following, respectively:¹³

(37) Al-säbbär-äčč-əmm

NEG-break.PST-3sg.F-NEG

“She did not break”

¹² Leslau (1995) does not provide glossing for his examples; thus, I provide the gloss for every Amharic example included in this paper.

¹³ Note that similarly to negation, subject agreement markers are affected by tense; there are two sets to encode subjects: one for past and the other for non-past. For example, although the subject is the same in (38) and (41), it is encoded by different suffixes, namely *-ä* and *y-*.

(38) Al-säbbär-ä-mm

NEG-break.PST-3sg.M-NEG

“He did not break”

The consonant *l* in the prefix *al-* is assimilated to a following *r*, i.e.,

(39) Ar-rädd-ä-mm

NEG-help.PST-3sg.M-Neg

“He did not help”

It is worth noting in this context that the suffix *-(ə)mm* may occur with the verb as well as with the personal pronoun to deliver the meaning of “either” as in (40).

(40) əssu-mm al-awwäq-ä-mm

3sg.M-Neg NEG-know.PST-3sg.M-NEG

“He did not know either”

Second, when the clause is non-past, SN is done by the use of the negative circumfix *a- . . . - (ə)mm* as in the following examples:

(41) A-y-säbr-əmm

NEG-3sg.M-break.PRES/FUT-NEG

“He does not (will not) break”

(42) A-t-säbr-əmm

NEG-3sg.F-break.PRES/FUT-NEG

“She does not (will not) break”

The following pair shows that negative constructions in Amharic are symmetric. Note that the only structural difference between negatives and affirmatives is the negative circumfix only.

(43) a. Säbbär-ä

break.PST-3sg.M

“He broke”

b. Al-säbbär-ä-mm

NEG-break.PST-3sg.M-NEG

“He did not break”

Table (5): SN in Amharic

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Circumfix [al- . . . -(ə)mm]			
Place	<i>Past</i> : NEG + Verb + SUB + NEG <i>Non-past</i> : NEG + SUB + Verb + NEG			

3.1.4 Persian – Iranian language / Indo-European family (Kwak, 2010)

Persian is a member of the Iranian languages, a subgroup of the Indo-European language family. It is spoken as the official language in Iran.

In Persian, negation is expressed morphologically by the use of the negative prefix *na-* attached to the verb stem, i.e.,

(44) Diruz na-raft-am madrese

yesterday NEG-went-1sg school

“I did not go to school yesterday”

(45) Ali na-xah-ad raft- Ø

Ali NEG-will-3sg went-3sg

“Ali will not go”

The prefix *na-* has two other allomorphs: *ne-* and *ni-*. The first one, *ne-*, occurs exclusively with the durative marker *mi-* which expresses present tense or progressive aspect (See example 46 and 47 below). *ni-*, in contrast, is only used with the third singular form of the verb *budan* “to be” as in (48).¹⁴

(46) Ali ketab ne-mi-xun-e
 Ali book NEG-DUR-read-3sg

“Ali does not read a book”

(47) Emruz pish-etun ne-mi-a-m
 Today in front of you NEG-DUR-come-1sg

“Today, I’m not coming to you”

(48) In ketab-e ali ni-st
 this book-EZ Ali NEG-is

“This is not Ali’s book”

The negative construction in Persian is symmetric since negatives require no further changes except the addition of the negative marker *na-*. Compare the following affirmative to its negative counterparts.¹⁵

(49) a. Diruz raft-am madrese
 yesterday went-1sg school

“I went to school yesterday”

b. Diruz na-raft-am madrese
 yesterday NEG-went-1sg school

“I did not go to school yesterday”

¹⁴ EZ in this example is abbreviation for the word *ezafe*. It is used as a liker in possessive constructions (Ghomeshi, 1997).

¹⁵ Example (49.b) is provided by J. Ghomeshi, personal communication.

Table (6): SN in Persian

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Prefix [na-].			
Place	NEG + (DUR) + Verb + SUB			

3.1.5 Dime – South-Omotoc language / Afro-asiatic family (Seyoum, 2008)

Dime is a south-Omatic language which belongs to the Omotic languages group, a subgroup of the Afro-asiatic language family. It is spoken in the southern part of Ethiopia.

In Dime, SN in expressed morphologically by attaching the negative suffix *-kay* to the verb. When the clause is negated, tense/aspect and subject agreement markers are omitted. Consider the following examples where the only indication for tense is the use of “today” and “tomorrow”:

(50) Na ?ini ?ad-kay
 3.SG.F.SUBJ today come-NEG

“She does not come today”

(51) Na gaʁim ?ad-kay
 3.SG.F.SUBJ tomorrow come-NEG

“She will not come tomorrow”

The suffix *-kay* is reduced to *-ka* when it is followed by another morpheme in the clause, i.e.,

- (52) Nu soo ʔad-ka dahim
 3.SG.M.SUBJ here come-NEG stay

“He has not come yet”

The negator *-kay* is realized as *-k’ay* after ejective consonants (p’, s’, t’, c’, k’) or the velar nasal *ŋ*, i.e.,¹⁶

- (53) Nu tiŋ-k’ay
 3.SG.M.SUBJ go-NEG

“He does/will/did not go”

As mentioned above, tense-aspect markers are omitted in negative constructions; however, there is one exception for this rule. That is, if the negative clause is a refusal expression, the existential verb *deet* and the future tense marker *-tub* follow the negative suffix as in the following example:

- (54) Wotu gaʔim wunt’-k’a-deet-tub
 1.PL.SUBJ tomorrow work-NEG-exist-FUT

“We shall not work tomorrow”

(Literally: We are expected to work tomorrow, but we refuse to work).

The negative construction in Dime is asymmetric since affirmatives are inflected for tense/aspect and have subject agreement markers, but negatives lack them. Consider the following and note that in (55) the verb has a tense marker and subject agreement whereas in (56) the verb lacks them and the only indication for tense is the word “yesterday”:

- (55) Nu don-im dex-i-n
 3.SG.M.SUBJ potato-ACC cook-PERF-3

“He cooked potato”

¹⁶ Seyoum (2008) does not provide the gloss for this example; thus, I did.

(56) Na naaʋi ʔad-kay
 3.SG.F.SUBJ yesterday come-NEG

“She did not come yesterday”

Table (7): SN in Dime

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction				✓
Negative marker	Suffix [-kay]			
Place	Verb+NEG			

3.1.6 Desano – Tucanoan family (Miller, 1999)

Desano belongs to the Tucanoan language family. It is spoken in the southeastern part of Colombia.

SN in Desano is accomplished morphologically by the negative suffix *-biri* attached to the verb stem. This suffix has many allomorphs, and the choice between them is governed by tense as follows:

Present tense: present affirmative clauses are negated by the use of the suffix *-bea* as in the following example:

(57) De yiʔri-bea-a igi baye-ri
 first answer-NEG-NON3.PRES 3sg.M chant-DVB

“The sickness does not respond to his chanting (not from the begging)”

Past tense: Desano speaker distinguish between two kinds of past: remote past and recent past. Remote past clauses are negated by the suffix *-biri* as in (58) whereas recent past clauses take *-bir* as in (59).

(58) Yi-sa oa-ro ia-biri-kari-bi
 1sg.also be.good-DVB see-NEG-seem-NON3.RemotePST
 “I also did not see it very well”

(59) Oa-ro basi-bir-a-ba
 be.good.DVB know-NEG-Recent.PST-3pl
 “They did not know well”

Future tense: Future tense is also distinguished in Desano based on how certain the speaker is that the described event will occur. In this vein, future events can be viewed as “might occur”, “probably will occur” and “certainly will occur”. When the event might or probably will not happen, the suffix *-biri* is used as in (60). And when the speaker is certain the event will not take place, the suffix *-sobe* is used as in (61).

(60) Era yabiga wa-biri-bokoba
 3pl tomorrow go-NEG-FUT.might.3p
 “Probably they will not go tomorrow”

(61) Iri-re ba-sobe igi
 this-SPC eat.FUT-NEG.FUT 3sg.M
 “He will never eat this”

The following affirmative and negative is to show that the negative construction is symmetric in Desano. Note that the only structural difference between them is the negative marker.

- (62) Oa-ro waʔa-bi
 be.good-DVB go.PRES-3sg.M
 “He goes well”
- (63) Oa-ro basi-bir-a-ba
 be.good.DVB know-NEG-Recent.PST-3pl
 “They did not know well”

Table (8): SN in Desano

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Suffix [-biri] or [-sobe]			
Place	Verb + NEG + Tense + SUB			

3.1.7 Kham – Tiboto-Burman language / Sino-Tibetan family (Watters, 2002)

Kham is one of the Tiboto-Burman languages, a branch descends from the Sino-Tibetan language family. It is spoken in the Rapti zone, Mid-western part in Nepal.

SN in Kham is morphologically expressed by the negative prefix *ma-* affixed to the verb stem. The following are representative examples:

- (64) Nai-sə nə-ma-ba-ke
 1sg-ASC 2sg-NEG-go-PERF
 “You did not go with me”
- (65) Ma-jəi-zya-khe-rə-ho
 NEG-make-PRG-PROB-3pl-PROB
 “They probably are not making it”

The negative construction is symmetric in Kham. Compare the following affirmative to its corresponding negative and note that *ma* is the only structural different between them:

(66) a. Ba-ke

go-PERF

“He went” or “He left”

b. Ma-ba-ke

NEG-go-PERF

“He did not go”

Table (9): SN in Kham

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Prefix [ma-]			
Place	NEG + Verb + Tense			

3.1.8 Tauya – Madang language / Trans New Guinea family (MacDonald, 1990)

Tauya is a Madang language belonging to the Trans New Guinea language family. It is spoken in Madang Province, Papua New Guinea.

In Tauya, SN is syntactically expressed by placing the negative particle *wate* pre-verbally. As examples, consider the following:

(67) Ø-wanimo-ra wate ese-e-ʔa
 3sg-name-TOP NEG hear-1/2-IND

“I did not hear her name”

- (68) Yene-ra wate ou-pope-e-ʔa
 Bird-TOP NEG pierce-HAB-1/2-IND
 “I do not shoot birds”

The negative construction is symmetric in Tauya; that is, any affirmative clause can be negated by the addition of *wate* only. Compare the following affirmative to its negative counterparts and note that the negator *wate* is the only difference:

- (69) a. Yene-ra ou-pope-e-ʔa
 Bird-TOP pierce-HAB-1/2-IND
 “I shoot birds”
- b. Yene-ra wate ou-pope-e-ʔa
 Bird-TOP NEG pierce-HAB-1/2-IND
 “I do not shoot birds”

Table (10): SN in Tauya

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [wate].			
Place	Pre-verbally			

3.1.9 Northern Mansi – Ugric language / Uralic family (LMU, 2013)

Mansi is an Ugric language which belongs to the Uralic language family. It is spoken in western Siberia, Russia.

Mansi speakers express SN syntactically by placing the negative particle *at* before verbs as the following examples show:

(70) Am at tot-eyəm
 1sg NEG bring.PRES-1sg

“I do not bring”

(71) Am at tot-ne-m
 1sg NEG bring-EVID-1sg

“It seems I do not bring”

(72) Am notne ayi at ons-eyəm
 1sg beautiful daughter NEG have.PRES-1sg

“I do not have a beautiful daughter”

The negative construction in Mansi is symmetric and that can be seen in the following example where no difference can be observed between the affirmative clause and its negative counterpart other than the negative marker *at*.

(73) a. Am tot-eyəm
 1sg bring.PRES-1sg

“I bring”

b. Am at tot-s-əm
 1sg NEG bring-PST-1sg

“I did not bring”

Table (11): SN in Mansi

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [at]			
Place	Pre-verbally			

3.1.10 Maithili – Indo-Aryan language / Indo- European family (Yadav, 1996)

Maithili is a member of the Indo-Aryan languages, a subgroup of the Indo-European language family. It is spoken in eastern and northern of the Bihar state in India.

SN in Maithili is accomplished syntactically by the use of the negative particle *nəi* “not”. This particle is placed immediately before the verb. Consider the following as illustrative examples:

(74) *Nokər nəi æ-l*
 servant NEG come-PST

“The servant did not come”

(75) *Chəra nəi sut-əit əich*
 boy NEG sleep.IMPF AUX.PRST

“The boy does not sleep”

The negative construction in Maithili is symmetric since every affirmative clause can be negated by the addition of the negative marker only. As examples, compare the following clauses:

(76) O ghər ge-l-ah
 3sg.H house go.PST-3sg.H

“He went home”

(77) O nəi mər-l-ah
 3.sg.H NEG die-PST-3sg.H

“He did not die”

Table (12): SN in Maithili

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [nəi]			
Place	Pre-verbally			

3.1.11. Western Shoshoni – Central Numic language / Uto-Aztecan family (Crum & Dayley, 1993)

Western Shoshoni is one of the dialects of the Shoshoni language. Shoshoni is a member of the central Numic languages, a subgroup of the Uto-Aztecan language family. It is spoken in the Duck Valley Reservation, between Idaho and Nevada State in the United States of America.

SN in Western Shoshoni is expressed by the negative particle *kai*, which is placed after the first constituent in the clause. As examples, consider the following:¹⁷

¹⁷ In the interlinear gloss, Crum and Dayley (1993) do not separate attached morphemes. For example, in (70) *tematsai* is the verb “help” and *te* is the tense marker; thus, I separate them with a hyphen. However, in the original source, Crum and Dayley just present them as *tematsaite* and gloss them as “help”.

(78) Soteen kai tekka-yu
 those NEG eat-repetitive

“They did not eat”

(79) Soten tainna kai new-i tematsai-te
 that man NEG people-OBJ help-HAB

“That man does not help people”

When the main verb is followed by an auxiliary, *kai* negates the notion indicated by the auxiliary not the main verb. For example, in the following clause, the negated verb is *sua* “want” not *yetse* “get up”:

(80) Mary kai yetse-sua-nna

Mary NEG get up-want-GENERAL ASPECT AND TENSE¹⁸

“Mary does not want to get up”

Sometimes the suffix *-wa’i* “unable, cannot, lack, be without” is affixed to negated verbs as in the following example:

(81) Ne kai te’eya-wa’i-yu
 1.SG NEG fear-cannot-repetitive

“I will not be afraid”

Crum and Dayley do not provide an explanation for such a combination; however, it can be explained by Jespersen Cycle (see section 1.1). Based on Jespersen’s observation, one can assume that negation in Western Shoshoni is in stage two where the negator is found insufficient and supported by another morpheme, which is the suffix *-wa’i* in this case.

¹⁸ As Crum and Dayley (1993) put it, *-nna* is the “General aspect and tense”, but they do not specify what they mean by that. I assume, though, *-nna* is the present tense marker. That is, in their book under “tense and aspect suffixes”, *-nnu* marks past tense, *-ten* indicates habitual aspect, etc., but there is no suffix to signal present tense. I also notice that in every example in the book where *-nna* is the tense marker, the tense in the English translation is present.

The negative construction is symmetric in Western Shoshoni. Consider the following clause and note that *kai* is the only structural difference between them:

(82) Tso'apneh new-i makwiyammi-nna
ghost people-OBJ scare-GENERAL ASPECT AND TENSE

“A ghost scares people”

(83) Soten tainna kai new-i tematsai-te
that man NEG people-OBJ help-HAB

“That man does not help people”

Table (13): SN in Western Shoshoni

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [kai]			
Place	After the first constituent			

3.1.12 Negation in SOV languages

As Table (14) presents, SN is expressed morphologically (found in 7 languages) more than syntactically (found in 4 languages) in SOV languages. In languages where the negative strategy is morphological, the negator is a suffix in four of them (Japanese, Turkish, Dime and Desano). And in two languages (Persian and Kham), it is a prefix. In Amharic only, the negative marker is a circumfix. However, regardless of the affix type, it is always attached to the main verb. In Japanese, however, when the main verb is inflected for aspect, it is followed by an auxiliary which then takes the negative marker.

In languages where the negative strategy is syntactic (Tauya, Mansi, Maithili and Western Shoshoni), the negator is a particle in all of them. It is always pre-verbal except in Western Shoshoni where the negative particle follows the first constituent in the clause.

Symmetric negative constructions are significantly more common than asymmetric constructions. They are observed in 9 languages. Japanese and Dime are the only languages where negative constructions are asymmetric.

Table (14): SN in SOV languages

<u>Language</u>	<u>Morphological</u>	<u>Syntactic</u>	<u>Construction</u>
Japanese	✓		Asymmetric
Turkish	✓		Symmetric
Amharic	✓		Symmetric
Persian	✓		Symmetric
Dime	✓		Asymmetric
Desano	✓		Symmetric
Kham	✓		Symmetric
Tauya		✓	Symmetric
Mansi		✓	Symmetric
Maithili		✓	Symmetric
Western Shoshoni		✓	Symmetric

3.2 SVO Languages

3.2.1 Swahili – Bantoid language / Niger-Congo family (Ngongani, 2001)¹⁹

Swahili is a Bantoid language belonging to the Niger-Congo language family. It is spoken in several countries in Africa, i.e. Kenya, Tanzania, Zanzibar, Uganda and Democratic Republic of Congo, Zambia.

SN in Swahili is expressed morphologically by the use of the prefixes *si-* and *ha-*. *si-* is used exclusively with first person singular subjects, whereas *ha-* is used with any other subject. Consider the following examples:²⁰

(84) Si-ta-ondoka

NEG-FUT-leave

“I will not leave”

(85) Ha-wa-ja-ondoka

NEG-3.PL-PERF-leave

“They have not left”

Swahili is a language that has both: symmetric and asymmetric negative constructions. The construction is symmetric with future clauses since no structural differences are observed between future affirmatives and future negatives aside from the presence of the negative marker.

As examples, compare the following clauses:

(86) a. Wa-ta-ondoka

1.PL-FUT-leave

“They will leave”

¹⁹ Ngongani does not provide the gloss for his examples; thus, I did.

²⁰ As in example (84), first singular subjects are not marked in negative clauses. This is the case for most of Swahili speakers; however, some speakers do mark them. In this case, sentence (1) will be *si-n-ta-ondoka* where the prefix *n-* encodes subject agreement.

b. Ha-wa-ta-ondoka

NEG-1.PL-FUT-leave

“They will not leave”

In contrast, the construction is asymmetric if the clause is present or past. That is, in affirmatives, the present marker is the prefix *na-*, but in negatives it is the suffix *-i*; the past marker is *li-* in affirmatives whereas in negatives it is *ku-*. Consider the following affirmatives and their negative counterparts:

(87) a. Wa-na-ondoka

3.PL-PRES-leave

“They are leaving”

b. Ha-wa-ondoka-i

NEG-3.PL-Leave-PRES

“They are not leaving”

(88) a. Wa-li-ondoka

3.PI-PST-leave

“They left”

b. Ha-wa-ku-ondoka

NEG-3.PI-PST-leave

“They did not leave”

The strategy of negating copula clauses is parallel to the one discussed above except when these clauses are in the present. The present affirmative copula verb is *ni*. This verb is replaced by *si* when the clause is negated as the following examples illustrate:

- (89) a. Juma ni m-chezaji
 Juma COP 1.SG-player
 “Juma is a player”
- b. Juma si m-chezaji
 Juma NEG.COP 1.SG-player
 “Juma is not a player”

Table (15): SN in Swahili

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	✓
Negative marker	Prefixes [si-] and [ha-]			
Place	NEG+SUB+Tense+Verb			

3.2.2 Mocovi / Guaicuruan family (Grondona, 1998)

Mocovi belongs to the Guaicuruan language family. It is spoken in the northern part of Santa Fe province as well as the southern part of Chaco province, Argentina.

SN in Mocovi is expressed morphologically by a negative proclitic that has two allomorphs: *sqa*= and *se*= . According to Grondona (1998), the choice between them is not clear yet. Both of them, however, must be attached to the verb. As examples, consider the following:²¹

- (90) Se=s=aʔde:n
 NEG=1AC=know
 “I do not know”

²¹ Note that there are no tense markers in these examples. That is, tense in Mocovi is expressed explicitly by words like “today”, “earlier”, “before”, “after”, etc.

(91) Noʔom yagat kaʔ sqae=s=ik
 if rain then NEG=1AC=go

“If it rains I do not go”

In Mocovi, negation is constructionally symmetric because every affirmative clause can be negated by the addition of the negative marker only. Compare the following clauses:

(92) Ø=aʔde:n-i
 2AC=know-2.SG.F

“You (SG.F) know”

(93) Qam se=s=aʔde:n-ag
 but NEG=3AC=know-1.PL

“But we do not know”

Table (16): SN in Mocovi

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Proclitic [sqae=] and [se=]			
Place	NEG+(AC)+Verb+SUB			

3.2.3 Neve’ei – Oceanic language / Austronesian family (Musgrave, 2007)

Neve’ei is one of the Oceanic languages, a subgroup of the Austronesian language family. It is spoken in the village of Vinmavis on the west coast of Malakula, an island in the Republic of Vanuatu.

SN in Neve’ei is expressed morphologically and is marked discontinuously by the negative circumfixes *sV-.....-si* (meaning “not”) and *sV-.....-vang(an)* (meaning “not yet”).²² Both circumfixes are attached to the verb stem; the prefix *sV-* occurs between the subject agreement prefix and the verb stem while the suffixes, *-si* and *-vang(an)*, always occur as final morphemes in the verb. The following exemplify the use of the negative circumfix *sV-...-si*:²³

- (94) Nelabut i-se-mah-si
 rat 3.SG.RL-NEG-die-NEG

“The rat did not die”

- (95) No-so-nonong-on-si nemagarian tno
 1.SG.RL-NEG-finish-TRANS-NEG work 1.SG.POSS

“I have not finished my work”

As illustrated by the examples above, the suffix *-si* is invariant; it has the same shape whether the negated verb is transitive or intransitive. The suffix *-vang(an)*, on the other hand, is affected by the transitivity of the verb. It is *-vang* with intransitive verbs and *-vangan* with transitive verbs. The following examples represent each case, respectively:

- (96) Nelabut i-se-mah-vang
 rat 3.SG.RL-NEG-die-NEG

“The rat has not died yet”

- (97) No-so-nonong-on-vangan nemagarian tno
 1.SG.RL-NEG-finish-TRANS-NEG.TRANS work 1.SG.POSS

“I have not finished my work yet”

²² The vowel in the prefix *sV-* is subject to the vowel harmony rules.

²³ Note that tense in Neve’ei is unmarked and determined by the context.

In Neve'ei, the negative construction is symmetric. That is, every affirmative clause can be negated by the addition of the negative markers only. As examples, consider the following affirmative and negative and note that the negative marker is the only structural difference between them:²⁴

(98) At-dedan

3.PL.RL-dive

“They (all) dived”

(99) Nelabut i-se-mah-si

rat 3.SG.RL-NEG-die-NEG

“The rat did not die”

Table (17): SN in Neve'ei

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓			
SN construction			✓	
Negative marker	Circumfix [sV-.....-si] and [sV-.....-vang(-an)]			
Place	SUB+NEG+Verb+(TRANS)+NEG			

3.2.4 Moskona - East Bird's Head family (Gravelle, 2010)

Moskona belongs to the East Bird's Head languages of west Papua spoken in the Bird's Head peninsula (or Doberai peninsula).

²⁴ ²⁴ See section (4.2) for the relationship between realis/irrealis distinction and asymmetric negative constructions.

In Moskona, SN is expressed syntactically by the use of the negative particles *éra* and *néesa*.²⁵ They always appear clause-finally.²⁶ The following examples illustrate the use of the negative particle *éra*:²⁷

(100) Bua bi-em-et mar éra
 2SG 2SG-IRL-eat thing NEG

“You did not eat (anything)”

(101) I-osnok i-ognunui i-em-orot dif éra
 3PL-person 3PL-many 3PL-IRL-go.with 1SG NEG

“Many people did not accompany me”

The negative particle *néesa*, in contrast, is used to indicate probability; for example, in (102) *néesa* employed instead of *éra* because the speaker believes that the event probably did not occur.

(102) Bua bi-em-et mar néesa
 2.SG 2.SG-IRL-eat thing NEG

“You did not eat” = “You did not eat probably”

The negative construction in Moskona is symmetric in some cases and asymmetric in others. That is, if the clause is future, negation is expressed by the addition of the negative marker only. Compare the following clauses:

(103) Em-ek

IRL-see

“(S)he will see”

²⁵ It is worth noting that in Moskona constituent negation is not observed. Additionally, negative indefinites such as “nothing” or “nobody” are completely absent (Gravelle, 2010).

²⁶ Gravelle (2010) calls them adverbs while I call them particles because they always appear uninflected.

²⁷ In Moskona, past and present tense are unmarked. Future, in contrast, is marked by the irrealis prefix *em-*.

(104) Eda eri susuy no-ma-I i-em-eyta mar gug bua éra
 then they.PL else DNR-far-GIV 3.PL-IRL-take thing to you.SG NEG
 “Then, those people will not give things to you”

If the negated clause is present or past, the negative construction is asymmetric. That is, in addition to the negative marker, verbs in negatives are inflected for irrealis whereas in affirmatives they are not. Such an inflection presents another difference between affirmatives and negatives aside from the negative marker. As examples, compare the following affirmative and negative:

(105) Mif mi-oyka
 1.PL 1.PL-dance
 “We danced”

(106) Bua bi-em-et mar éra
 2SG 2SG-IRL-eat thing NEG
 “You did not eat (anything)”

Table (18): SN in Moskona

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	✓
Negative marker	Particles [éra] and [néesa]			
Place	Finally in the clause			

3.2.5 Jahai – Aslian language / Mon-Khmer language family (Burenhult, 2005)

Jahai belongs to the northern Aslian subgroup of the Aslian languages, a branch of the Mon-Khmer language family. It is spoken in the Malay Peninsula.

In Jahai, SN is syntactically expressed by the negative particle *bra?*. It occurs in free variation with *bokan*, the borrowed negative particle from Malay. Both particles can occur either pre-verbally or initially in the negated clause. The following are representative examples:²⁸

(107) Bra? he? ja=kjeŋ klinj kritəh
 NEG 1.PL.INCL IRL=to.hear sound car

“We did not hear the sound of the car”

(108) Bokan ja=b-ŋk-ŋək-to.sit kampoŋ
 NEG IRL=PRG-IMPF village

“I was not living in a village”

Like Moskona, Jahai has both types: symmetric and asymmetric negative constructions. That is, verbs in negative clauses are inflected for irrealis, whereas in affirmatives they are not unless they occur in future. Consider the following:

(109) Ja=cip
 IRL=to.go

“(I) will go”

(110) bra? gin ja=wek
 NEG 2/3PL IRL=to.go.back

“They will not come back”

(111) ?o? lɔj
 3.SG to.run

“He ran”

²⁸ Note that tense in Jahai is unmarked. It is determined by the context.

(112) Jε? bra? ja=?t?et
 1.SG NEG IRL=to.know

“I do not know”

As can be seen in (109) and (110), whether the future clause is negated or not, verbs are inflected for irrealis. If the clause is non-future, however, the verb is not inflected for irrealis as in (111) unless it is negated as in (112).

Table (19): SN in Jahai

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	✓
Negative marker	Particle [bra?] and [bokan]			
Place	Pre-verbally or Initially in the clause			

3.2.6 English – Germanic language / Indo-European family²⁹

English is a member of the Germanic languages, a branch of the Indo-European language family.

SN in English is achieved syntactically by the negative particle ‘not’, i.e.,³⁰

(113) She does not eat.

(114) He did not write.

(115) He should not go.

(116) He is not going.

²⁹ The analysis and the data here are based on my personal knowledge of the language.

³⁰ The negative particle *not* seems to be changing in English; it is sometimes used as clitic, i.e., He isn’t there.

If the clause is a copula or has an auxiliary verb, negation is expressed by adding the negative particle only; thus, the negative construction is symmetric in this case, i.e.,

(117) a. He is smart.

b. He is not smart.

(118) a. She is eating.

b. She is not eating.

When there is no auxiliary or a copula verb in the clause, the auxiliary “Do” is added which then will be inflected for tense and person. In this case, the negative construction is asymmetric because “Do” presents another structural difference between affirmatives and negative aside from the negator “Not”. As examples, consider the following affirmatives and their respective negative counterparts:

(119) a. He eats apples.

b. He does not eat apples.

(120) a. He gave me the book.

b. He did not give me the book.

Table (20): SN in English

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	✓
Negative marker	Particle “not”			
Place	After auxiliaries and copula verbs			

3.2.7 Russian – Slavic language / Indo-European family³¹

Russian is a member of the Slavic languages, a subgroup of the Indo-European language family. It is primarily spoken in Russia as the official language of the country.

SN in Russian is done syntactically by the use of the negative particle *ne*. It is always placed pre-verbally as the following examples show:

(121) On ne govor-i-t poanglijski
 3.SG.NOM NEG speak-3.SG-PRES English

“He does not speak English”

(122) On ne govor-i-l poanglijski
 3.SG.NOM NEG speak-3.SG-PST English

“He did not speak English”

The negative construction is symmetric in Russian; every verbal clause can be negated by the addition of the particle *ne* only. Compare the following affirmative to its corresponding negative counterparts:

(123) a. On ljvb-i-l et-o
 3.SG.NOM love-3.SG-PST 3.SG-ACC

“He loved it”

b. On ne ljvb-i-l et-o
 3.SG.NOM NEG love-3.SG-PST 3.SG-ACC

“He did not love it”

³¹ Examples in this section are provided by I. Volchok, personal communication.

Table (21): SN in Russian

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [ne]			
Place	Pre-verbally			

3.2.8 Lango – Nilotic language / Nilo-Saharan family (Noonan, 1992)

Lango is a Nilotic language belonging to the Nilo-Saharan language family. It is spoken in Lango Province in Uganda.

SN in Lango is expressed syntactically by the use of the negative particle *pé*.³² This particle is always placed pre-verbally as in the following examples:

(125) Locə pé o-bmo paco
 man NEG 3.SG-come.PERF home
 “The man did not come home”

(126) A-ryək pé a-mato kəŋɔ
 1.SG-wise NEG 1.SG-drink.HAB beer
 “I’m wise, I do not drink beer”

The negative construction is symmetric in Lango because no structural differences can be observed between affirmatives and negatives aside from the negative particle *pé*. As examples, compare the following affirmative clause to its negative counterpart.

³² According to Noonan (1992), *mom* is another negative marker in Lango which is used more conservatively; however, he does not provide any example to illustrate its use neither explains what he means by “more conservative”.

(127) a. Locə o-bino paco

man 3.SG-come.PERF home

“The man came home”

b. Locə pé o-bino paco

man NEG 3.SG-come.PERF home

“The man did not come home”

Table (22): SN in Lango

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [pé]			
Place	Pre-verbally			

3.2.9 Tetun Dili – Central Malayo-Polynesian language / Austronesian family (Klinken, Hajek, Nordlinger, 2002)

Tetun Dili is a member of the central Malayo-Polynesian languages, a subgroup of the Austronesian language family. It is spoken in Dili, the capital city of Timor.

In Tetun Dili, SN is syntactically expressed by the use of the negative particle *la*. It is always placed pre-verbally. This particle is usually paired with *ida* “one”. The function of *ida* is still unknown (Klinken, Hajek, Nordlinger, 2002). As examples, consider the following clause:³³

³³ As can be seen from the examples, there are no tense markers in Tetun Dili. Temporal information is expressed explicitly by words like “tomorrow”, “yesterday”, “last year”, etc. Once the hearer has identified the time, there is no need for the speaker to repeat the temporal expression again.

(128) Hau la ba Timor ida
 1.SG NEG go Timor one

“I did not go to Timor”

(129) Imi la komprende buat ida
 2.SG NEG understand thing one

“You do not understand”

The negative construction in Tetun Dili is symmetric, and that can be seen by comparing the following clauses:

(130) Ita fakar be
 1PL.INCL spill water

“We spill the water”

(131) Sira la tiru ida
 3.PL NEG shoot one

“They did not shoot (at us)”

Although Klinken Et al. (2002) are not certain about the function of the word *ida*, it can be explained by Jespersen’s Cycle (see section 1.1 above). Based on Jespersen’s observation, one can predict that the negative morpheme *la* in Tetun Dili has passed stage one where it is weakened and found insufficient. It is currently in stage two where it is strengthened by another morpheme, namely *ida*. Another evidence to support this assumption comes from the fact that when negation is expressed by *nunka* “never” or *nunka-mais* “never ever” (borrowed from Portuguese), the morpheme *ida* does not appear. *nunka* and *nunka-mais* are still strong; they have not been weakened. Thus, there is no need for the word *ida* to appear in order to support the notion of negation. Consider the following examples:

(132) Servisu nain ne nunka deskansa
 work master this never rest

“This diligent worker never rest”

(133) Ita nunka-mais koalia nune!
 1PL.INCL never.ever speak like.this

“We never talk like this!”

Table (23): SN in Tetun Dili

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [la]			
Place	Pre-verbally			

3.2.10 Kokama-Kokamilla - Tupi–Guarani language / Tupian family (Yopan, 2010)

Kokama-Kokamilla is a Tupi-Guarani language which belongs to the Tupian language family, a language spoken in the Peruvian Amazon.

In Kokama-Kokamilla, SN is formed syntactically by the use of the negative particle *tima*. This particle can be placed either initially in the clause or pre-verbally as illustrated in the following examples.³⁴

(134) Rana tima tseta uka-yara
 3PL.M NEG want house-make

“They do not want to build (their) house”

³⁴ Note that present tense is unmarked in Kokama-Kokamilla.

(135) Yaepe inu tima eyu tewe
 there 3PL.F NEG eat salt

“There, they do not eat salt”

(136) Tima ra=tseta eyu-n
 NEG 3SG.M-want eat-NZR

“He does not want food”

In Kokama-Kokamilla, the negative construction is symmetric. Consider the following clauses and note that *tima* is the only difference between them:

(137) Mui karuta etse
 snake bite 1SG.F

“The snake bites me”

(138) Tima ra tutuka chiru
 NEG 3SG.M wash cloth

“He does not wash the clothes”

Table (24): SN in Kokama-Kokamilla

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [tima]			
Place	Initially or Pre-verbally			

3.2.11 Negation in SVO languages

As indicated in Table (25) below, negation in SVO languages is accomplished syntactically (found in 7 languages) more than morphologically (found in 3 languages). In all of

the languages with syntactic SN, the negator is a particle. In three of them (Russian, Lango and Tetun Dili), negative particles are placed pre-verbally. In Jahai and Kokama-Kokamilla, the negative particle can occur either initially in the clause or pre-verbally. In Moskona, the particle is final in the clause, and in English the negative particle occurs after copula and auxiliary verbs

Morphological SN is observed in Swahili, Neve'ei and Mocovi. In Swahili, the negator is a prefix. In Neve'ei, it is a circumfix, and in Mocovi, it is a proclitic. However, in all of the three languages, negators are attached to the verb.

Symmetric negative constructions are found in six SVO languages, and in the other four languages (Moskona, Jahai, English and Swahili) both symmetric and asymmetric negative constructions are observed. No SVO language, however, has been attested where negative constructions are always asymmetric.

Table (25): SN in SVO languages

<u>Language</u>	<u>Morphological</u>	<u>Syntactic</u>	<u>Construction</u>
Swahili	✓		Symmetric & Asymmetric
Mocovi	✓		Symmetric
Neve'ei	✓		Symmetric
Moskona		✓	Symmetric & Asymmetric
Jahai		✓	Symmetric & Asymmetric
English		✓	Symmetric & Asymmetric
Russian		✓	Symmetric
Lango		✓	Symmetric
Tetun Dili		✓	Symmetric
Kokama-Kokamilla		✓	Symmetric

3.3 VSO languages

3.3.1 San Dionisio Ocotepéc Zapotec – Otomanguean family (Broadwell, 2011)

San Dionisio Ocotepéc Zapotec is an Otomanguean language spoken in Oaxaca, Mexico.

SN in San Dionisio Ocotepéc Zapotec is expressed syntactically and morphologically simultaneously. It is achieved by the particle *(qu)iity* placed initially in the clause and the clitic =*ti* attached to the verb.³⁵ As examples, consider the following negative clauses:

(139) Iity u-luu=ti Juaany bzyaa leeny bools
 NEG COM-put=NEG Juan beans in bag

“Juan did not put the beans in the bag”

(140) Iity ca-yaa=ti Marii
 NEG CONT-dance=NEG Maria

“Maria is not dancing”

In San Dionisio Ocotepéc Zapotec, the negative construction is symmetric. Compare the following clauses and note that no differences between them are observed other than the negative markers:

(141) Ca-ni guziw
 CONT-speak thunder

“It is thundering”

(142) Iity ca-yaa=ti Marii
 NEG CONT-dance=NEG Maria

“Maria is not dancing”

³⁵ Sometimes the negative particle *iity* is followed by a phrase instead of the main verb. In this case, the clitic *ti* is attached to that phrase which then will be interpreted as focus. Consider the following example:

iity bzyaa=ti u-luu Juaany leeny bools
 NEG beans=NEG COM-put Juan in bag

“Juan did not put the beans (Focus) in the bag”

Table (26): SN in San Dionisio Ocotepc Zapotec

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN	✓	✓		
SN construction			✓	
Negative marker	Particle [iity] and the clitic [=ti]			
Place	[iity] initially in the clause and [=ti] attached to the verb			

3.3.2 Saudi Arabic – Semitic language / Afro-Asiatic family³⁶

Saudi Arabic is a Semitic language, a branch under the Afro-Asiatic language family. It is spoken in Saudi Arabia. Like Amharic, Arabic is a Semitic language which uses root and pattern morphology for much of its inflection and derivation, but not for negation.

SN is syntactically expressed in Saudi Arabic. It is done by the use of the negative particle *ma* “not” which always occurs initially in the clause as the following examples show:³⁷

(143) Ma ʔakal kaled al-tufah
 NEG eat.PST Khaled the-apple.PL

“Khaled did not eat the apples”

(144) Ma yaʔkul kaled al-tufah
 NEG eat.PRES Khaled the-apple.PL

“Khaled does not eat the apples”

(145) Ma byʔkul kaled al-tufah
 NEG eat.FUT Khaled the-apple.PL

“Khaless will not eat the apples”

³⁶ The analysis and the data here are based on my personal knowledge of the language.

³⁷ It worth noting in this context that the particle *ma* is not the only negator in Saudi Arabic, but it is the only one used to express clausal negation.

The negative construction in Saudi Arabic is symmetric and that can be observed by comparing the following affirmatives to their corresponding negatives. Note that *ma* is the only difference between them.

- (146) a. Katab kaled al-rasaʔel
 write.PST Khaled the-letter.PL
 “Khaled wrote the letters”
- b. Ma katab kaled al-rasaʔel
 NEG write.PST Khaled the-letter.PL
 “Khaled did not write the letters”
- (147) a. Yaktub kaled al- rasaʔel
 write.PRES Khaled the-letter.PL
 “Khaled writes the letters”
- b. Ma yaktub kaled al- rasaʔel
 NEG write.PRES Khaled the-letter.PL
 “Khaled does not write the letters”

Table (27): SN in Saudi Arabic

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [ma]			
Place	Initially in the clause			

3.3.3 Welsh – Celtic language / Indo-European family (MacAulay, 1992)

Welsh a member of the Celtic languages, a branch of the Indo-European language family. It is spoken in Wales.

In Welsh, SN is achieved syntactically by placing the negative particle *ni(d)* initially in the clause as in the following examples:

(148) Ni welodd ef yr haul
 NEG see.PST 3.sg the sun
 “He did not see the sun”

(149) Ni welodd ef ddim
 NEG see.PST 3.sg anything
 “He did not see anything”

In Welsh, the negative construction is symmetric; every affirmative sentence can be negated by the addition of the negative particle only. Compare the following clauses:

(150) Candodd ef gan iddi hi
 sing.PST 3.sg song to her
 “He sang a song to her”

(151) Ni welodd ef yr haul
 NEG see.PST 3.sg the sun
 “He did not see the sun”

Table (28): SN in Welsh

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	
Negative marker	Particle [ni(d)]			
Place	Initially in the clause			

3.3.4 Hdi – Biu-Mandara language / Afro-Asiatic family (Frajzyngier, 2002)

Hdi is one of the Biu-Mandara languages, a branch of the Chadic languages that descends from the Afro-Asiatic language family. It is spoken in Tourou and in some of the settlement in the Far North Province of Cameroon.

SN in Hdi is expressed discontinuously; it involves two negative particles, namely *a* and *wa*. The particle *a* comes immediately after the verb while *wa* occurs clause-finally. The following are representative examples:

(152) Za a ta hlu'wi wa
 eat NEG OBJ meat NEG

“He does not eat meat”

(153) Gwada a mbitsa wa
 speak NEG Mbitsa NEG

“Mbitsa does not speak”

(154) Xva-f a xdi ta vara kda wa
 plant-UP NEG Hdi OBJ beans last year NEG

“Hdi did not plant beans last year”

Negative clauses in Hdi have no tense inflections and the only way to determine tense in such clauses is by the discourse environment. In affirmative clauses, by contrast, such an ambiguity is not found because affirmatives must be inflected for tense or aspect as illustrated by the following examples:

(155) Ta taw zwaŋ

IMPF cry child

“A child cries”

(156) si ta dv-ay-ŋni ta hlii

PST PREP want-POT-1PLEX OBJ leave

“We wanted to leave”

Not all negatives are ambiguous; some of them are not. This is the case with future clauses only. When they are negated, the future marker disappears exactly like other tense markers in Hdi. However, the suffix *-ta* gets attached to the verb.³⁸ As examples, compare the following future clauses:

(157) Dza’a ngh-i-ka maxtsim

FUT see-1sg-2sg tomorrow

“You will see me tomorrow”

(158) Ks-u-ta a kri ta uva wa³⁹

devour-SO-REF NEG dog OBJ cat NEG

“The dog will not devour the cat”

³⁸ The suffix *-ta* appears in different environments in Hdi, i.e., to encode referentiality of the object, boundedness of the event in sequential clauses, etc. Frajzyngier (2002) calls it “referential marker”, but he is not certain about its function.

³⁹ As Frajzyngier (2002) puts it in his abbreviation list, the suffix *-u* (glossed as SO) is the “Point view of source”, but he does not discuss what he means by that.

To conclude, the fact that negators in Hdi are particles makes the negative strategy syntactic. The negative construction is asymmetric; that is, the major structural difference between affirmatives and negatives aside from the negative markers is that negative clauses lack tense inflections.

Table (29): SN in Hdi

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction				✓
Negative marker	Particles [a] [wa]			
Place	[a] follows the verb and [wa] follows the clause (Discontinuous)			

3.3.5 Musqueam – Salishan family (Suttles, 2004)

Musqueam belongs to the Salishan language family. It is spoken in the Musqueam Indian reserve near to Vancouver, British Columbia.

In Musqueam, SN is accomplished syntactically by the negative particle *ʔəwə* placed initially in the clause. As examples, consider the following and note that tense is not marked in non-past negatives as in (159) whereas past tense is indicated by the auxiliary *niʔ* as in (160)⁴⁰:

(159) ʔəwə ct nem-ət
 NEG 1.PL go-1PL
 “We do/will not go”

⁴⁰ It is worth mentioning that in Musqueam, *ʔl* and *niʔ* are two auxiliaries that mean “be here” and “be there”, respectively. They can be used to refer to time because “the here” is usually meant now and “the there” means then (Suttles, 2004).

(160) ?əwə cən niʔ-ən nem
 NEG 1.sg AUX-1.SG go
 “I did not go”

The negative construction in Musqueam is asymmetric for three reasons. First, while negative clauses have subject agreement markers, affirmatives do not have them. Compare the following clauses and note that the auxiliary verb in (161) has no subject agreement since the clause is affirmative whereas in (162) the subject agreement marker - *ən* is attached to it because the clause is negative:

(161) Niʔ cən cew-ət
 AUX 1.SG help-TRANS
 “I helped him”

(162) ?əwə cən niʔ-ən nem
 NEG 1.sg AUX-1.SG go
 “I did not go”

Second, negation in Musqueam changes the word order of the clause; that is, verbs in affirmatives precede subjects as in (163) below whereas in negatives they follow them as in (164). Third, future tense is marked by the particle *cəʔ* in affirmatives as in (163). Such a particle does not appear in negatives; thus, they could be interpreted as present or future as in (164).

(163) Nem cən cəʔ
 go 1.sg FUT
 “I will go”

(164) ʔəwə	cən	nem-en
NEG	1.SG	go-1.SG
“I do/will not go”		

Table (30): SN in Musqueam

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction				✓
Negative marker	Particle [ʔəwə]			
Place	Initially in the sentence			

3.3.6 Dupanangan Agta –Philippine language / Austronesian family (Robinson, 2008)

Dupanigan Agta is one of the Philippine languages, a subgroup of the Austronesian language family. It is spoken in the northeastern part of Luzon, Philippines.

In Dupanigan Agta, SN is expressed syntactically by the use of the negative auxiliary *awan*.⁴¹ *awan* always occurs initially in the clause. As examples, consider the following:⁴²

(165) Awan=ak	nag-langoy ⁴³
NEG=1.SG.NOM	COM.AV-swim
“I did not swim”	

⁴¹ It is worth noting that there are two types of auxiliary verbs in Dupanigan Agta: fully inflected like other verbs and those that make a little use of verbal morphology (Robinson, 2008). For example, the verb ‘go’ is a fully inflected auxiliary verb in Dupanigan Agta; therefore, in a clause where ‘go’ is an auxiliary, aspect is marked twice: on the main verb as well as on the auxiliary, i.e.,

In-um-angay=dan	hidi	nag-taggad	ha	malinganay
COM-AV-go=already	3.PL.NOM	COM.AV-prune	OBL	malinganay

“They went and pruned the branches of the malinganay tree (to get the fruit)”

The negative auxiliary *awan*, in contrast, is not a fully inflected auxiliary; it does not take aspect inflections.

⁴² Note that in Dupanigan Agta present tense is unmarked and this can be seen in (166).

⁴³ Note that the (=) between *awan* and *ak* does not mean *awan* is a proclitic; it is to indicate that pronouns in Dupanigan Agta are clitics.

- (166) Awan=ko katandi
 NEG=1.SG.GEN know
 “I do not know”

The negative construction in Dupanangan Agta is asymmetric. In affirmatives, subject agreement inflections appear on the main verb. In negatives, however, they appear on the negative auxiliary. Consider the following affirmative clause and its corresponding negative:

- (167) a. Nag-langoy=ka
 COM-swim=1.SG.NOM
 “I swam”
- b. Awan=ak nag-langoy
 NEG=1.SG.NOM COM.AV-swim
 “I did not swim”

Table (31): SN in Dupanangan Agta

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction				✓
Negative marker	Auxiliary [awan]			
Place	Initially in the clause			

3.3.7 Mam - Mayan family (England, 1983)

Mam is a Mamean language belonging to the Mayan language family. It is spoken in Todo Santos Mexico.

Mam speakers express negation syntactically by the use of two negative particles: *mii7n* and *nti7*.⁴⁴ Both of them occur initially in the clause. *mii7n* is used to negate future clauses. When these clauses are negated, tense and mood suffixes are omitted. Non-future clauses, on the other hand, are negated by the particle *nti7*, and when they are negated, tense is preserved.⁴⁵ As examples, consider the following:

(168) *Mii7n* \emptyset -*tzaaj* *jb'aal* *ja7la*
 NEG 3sg.come rain today

“It will not rain today”

(169) *Nti7* *o* *tz'e-tz* *n-laq'o-7n-a*
 NEG PST 3sg.ABS-DR-DR 1sg.ERG-buy-DR-1sg

“I did not buy it”

The negative construction in Mam is symmetric in certain cases and asymmetric in others. It is symmetric if the clause is present or past since no structural differences are found except the presence of the negative particle *nti7*. As examples, compare the following clauses:

(170) a. *Ma* *chin* *beet-a*
 recent.PST 1sg.ABS walk-1sg

“I walked”

b. *Nti7* *ma* *chin* *beet-a*
 NEG recent.PST 1sg.ABS walk-1.SG

“I did not walk”

⁴⁴ 7 here means the glottal stop ʔ.

⁴⁵ In his book, England (1983) uses different terminology for these clauses. He refers to future clauses as “potential” and to non-future clauses as “non-potential”.

If the clause is future, however, the negative construction is asymmetric. That is, in future affirmative clauses the future particle *ok* can optionally occur, and verbs must be inflected for potential (see examples 171 and 172 below). Such a particle and an inflection do not occur in future negatives as in (173).

- (171) K-tzaaj-al jb'aal ja7la
 3sg.ABS-come-POT rain today
 ‘‘It will rain today’’
- (172) Ok chin jawa-l tz'aq-a
 FUT 1.SG DR-POT slip-1.SG
 ‘‘I will slip’’
- (173) Mii7n Ø-tzaaj jb'aal ja7la
 NEG 3sg.come rain today
 ‘‘It will not rain today’’

Table (32): SN in Mam

	Negative Strategy			
	Morphological	Syntactic	Symmetric	Asymmetric
SN		✓		
SN construction			✓	✓
Negative marker	Particle [mii7n] and [nti7]			
Place	Initially in the sentence			

3.3.8 Negation in VSO languages

As Table (33) indicates, standard negation is achieved syntactically more than morphologically in VSO languages (found in 6 out of 7 languages). In five of them, the negative marker is a particle. It is placed pre-verbally in four languages (Mam, Saudi Arabic, Musqueam

and Welsh). Only in Hid (the fifth language with negative particles), SN is expressed discontinuously by two particles. The first one is placed post-verbally and the second one is clause-final. Dupanangan is the only VSO language that has an auxiliary as a negator.

Negation in San Dionisio Ocotepc Zapotec is a special case; that is, negation in this language is expressed morphologically as well as syntactically. The fact that one of the negators is a particle and the other is a clitic makes the negative strategy syntactic in one part and morphological in another. (See section 4.1 for more discussion about this phenomenon).

Among VSO languages, there is no clear tendency for one of the negative construction types. Negative constructions are symmetric in three languages (Saudi Arabic, San Dionisio Ocotepc Zapotec and Welsh), and asymmetric also in three (Hdi, Musqueam and Dupanangan). Mam is the only VSO language that has both symmetric and asymmetric negative constructions.

Table (33): SN in VSO languages

<u>Language</u>	<u>Morphological</u>	<u>Syntactic</u>	<u>Construction</u>
San Dionisio Ocotepc Zapotec	✓	✓	Symmetric
Saudi Arabic		✓	Symmetric
Welsh		✓	Symmetric
Hdi		✓	Asymmetric
Musqueam		✓	Asymmetric
Dupaningan Agta		✓	Asymmetric
Mam		✓	Symmetric & Asymmetric

4. Results and discussion

I present the result of the study in two sections. First, I discuss the correlation between negative strategies (Morphological vs Syntactic) and basic word order to see if there is any correlation between them. I also discuss negators and their placement in the clause. Second, I discuss the correlation between negative constructions and basic word order. I also explore the kinds of factors that result in asymmetric negation.

4.1 Word order and morphological vs. syntactic negation

As Table (34) presents, a sample of 28 languages (11 SOV, 10 SVO and 7 VSO) suggests that morphological negative strategies are more common in SOV languages; indeed they are found in 7 out of 11 languages. In four of them (Japanese, Turkish, Dime and Desano), negators are suffixes. In two languages (Persian and Kham) they are prefixes, and in one language only (Amharic) the negative marker is a circumfix. However, regardless of the type of the negative affix, it is always attached to the verb.

In SVO languages, only 3 out of 10 languages express negation morphologically: Swahili where the negative element is a prefix, Mocovi where the negator is a proclitic and Neve'ei where the negative marker is a circumfix. And, similarly to SOV languages, negators in the three languages are always attached to the verb.

San Dionisio Ocotepc Zapotec is the only VSO language with morphological negative strategy in the study. However, the strategy is not completely morphological neither totally syntactic. It is classified as morphological and syntactic simultaneously. That is, negation in this language is expressed discontinuously by a pre-verbal particle and a clitic attached to the verb as in the following example (Broadwell, 2011):

- (174) Iity ca-yaa=ti Marii
 NEG CONT-dance=NEG Maria
 “Maria is not dancing”

Since the negative strategy in San Dionisio Ocotepéc Zapotec is morphological as well as syntactic, it is excluded from the count in Table (34), (35) and (36). In other words, the strategy in this language is neither counted as morphological nor as syntactic.

Table (34): Morphological negation and Word order

Negative Strategy	Basic Word order		
	SOV	SVO	VSO
Morphological	7 out of 11	3 out of 10	0 out of 7

As in Table (35), syntactic negative strategies (where negation is accomplished by an uninflected particle, an auxiliary or a dummy auxiliary construction), on the other hand, are more frequent in languages with SVO word order (found in 7 out of 10 languages) and VSO word order (found in 6 out of 7 languages). Such a strategy is found in only four SOV languages, and negators in all of them are particles placed pre-verbally except in Western Shoshoni where the negative particle occurs after the first constituent in the clause.

In the seven SVO languages, negative markers are also particle, and they are mostly pre-verbal; found in Russian, Lango and Tetun Dili. In Jahai and Kokama-Kokamilla, however, negative particles are either pre-verbal or initial in the clause. In Moskona, the negative particle is clause-final and in English the negative particle occurs after copula or auxiliary verbs.

Similarly to SOV and SVO languages, negative particles are the most common negators among VSO languages (found in 5 out of 7 languages). In four of these languages, these particles are pre-verbal. In Hdi, however, negation is expressed discontinuously by two particles: one of them pre-verbal, and the other clause-final. Dupaningan Agta is the only language found in the data where the negative marker is an auxiliary.

Table (35): Syntactic negation and word order

Negative Strategy	Basic Word order		
	SOV	SVO	VSO
Syntactic	4 out of 11	7 out of 10	6 out of 7

Based on the previous result one can conclude that regardless of basic word order, in syntactic negation, negative particles are the most common negators in the study because they are found in 16 languages (See Table 36 below). In 10 of the languages, they are placed pre-verbally. In morphological negation, on the other hand, negative suffixes and negative prefixes are both common. However, negative suffixes are slightly more frequent than negative prefixes; they are found in four languages whereas prefixes are observed in three.

Table (36): Negators

Strategy	Negators	Number of languages
Syntactic	Particles	16
	Auxiliaries	1
Morphological	Suffixes	4
	Prefixes	3
	Circumfixes	2
	Proclitics	1
Total	27	

The previous result is compatible to the one reported by Dahl (1979). Among his 247 languages, 99 express negation by uninflected particles. In 84 of them, negative particles are placed pre-verbally. In his study, Dahl observes that grammatical morphemes can be more easily attached to the preceding word than the following one. Therefore, pre-verbal negative particles are more common than post-verbal ones since they are more resistant to be attached (Dahl, 1979). This observation can be used to explain the phenomenon found in San Dionisio Ocotepc Zapotec where negation is expressed discontinuously by a pre-verbal particle and a clitic. In other words, in this language, the post-verbal morpheme has become a clitic because post-verbal morphemes are more easily fused to the preceding word. The preverbal one, however, is still a

particle since pre-verbal morphemes are more resistant to such a fusion. In fact, negation in San Dionisio Ocotepéc Zapotec can be interpreted by the notion of grammaticalization where a free morpheme becomes a clitic and then an affix over time (Hopper, 2003). Accordingly, one can assume that negation in this language is undergoing the process. That is, one of the negative markers has already become a clitic where the other one is still undergoing the change.

Another conclusion one can draw from the result of the study is that the place of subject is irrelevant, and the three word orders can actually be viewed as just two: OV and VO. That is, negative strategies found in SVO languages are similar to the ones observed in VSO languages; languages of both word orders tend to express negation syntactically whereas SOV (OV) languages tend to express it morphologically. Not only in negation, though, SVO and VSO languages exhibit some similarity in other aspects as well (See section 1.2 for more details).

After preparing the results found in the study, an attempt has been made to explain such results. In other words, why do OV languages tend to express negation morphologically whereas VO languages frequently express it syntactically? In this vein, I consider morphology in the following 10 languages: Japanese (Koga, 2012), Turkish (Shopen, 2007), Kham (Watters, 2002), Maithili (Yadar, 1996), Dime (Seyoum, 2009), Persian (Osemizadeh & Rahimi, 2006), English (Lehmann, 1973), Saudi Arabic⁴⁶, Kokama-Kokamilla (Yapan, 2010) and Tetun Dili (Klinken, Hajek & Nordlinger, 2002). Note that all of these languages are already included in the study. Unfortunately, though, I cannot include all of the 28 languages in this survey due to the limited sources available about them.

The aim of the survey is to determine whether the language is fusional, agglutinative or isolating. In fusional languages, a word consists of several morphemes and there are no clear boundaries between them; in agglutinating languages, a word also has many morphemes but the

⁴⁶ Information about morphology in Saudi Arabic comes from my personal knowledge of the language.

boundaries between them are clear; and in isolating languages, each word consists of one morpheme only (Shopen, 2007). In this survey, a language is classified as fusional, agglutinative or isolating if the source of that language explicitly states such a fact. The following table represents the findings of the survey:

Table (37): Morphology and word order

Morphology	OV	VO
Fusional	1	1
Agglutinating	5	0
Isolating	0	3
Total	6	4

As indicated in Table (37), five OV languages are agglutinative (Japanese, Turkish, Kham, Dime and Persian) and only one is fusional (Maithili). Interestingly, none of the OV considered languages is isolating. On the other hand, no agglutinative VO language is observed, and only one is fusional (Saudi Arabic). The rest (English, Kokama-Kokamilla and Tetun Dili) are isolating. This result might provide an explanation for the tendency found in their negative strategy. That is, if a language is agglutinative, it should be expected for categories like tense, negation, number, etc, to be marked morphologically, whereas in isolating languages we expect such categories to be marked syntactically. Therefore, based on a sample of 10 languages, it might be possible that OV languages tend to express negation morphologically because they tend

to be agglutinative, and VO languages frequently express it syntactically because they tend to be mildly isolating. However, although 10 languages is a very small number for such a generalization, it is, at the least, a reasonable number to explain the tendency found in this paper.

4.2 Word order and symmetric vs asymmetric negative construction

As for the negative construction (See Table 38 below), symmetric negative constructions are the most common type in SOV languages (found in 9 out of 11 languages). Japanese and Dime are the only SOV languages with asymmetric negative construction. In SVO languages, symmetric negation is also the most frequent type (observed in 6 out of 10 languages). In VSO languages, however, there is no clear tendency for one of the negative construction types over the other. That is, negative constructions are symmetric in three languages (Saudi Arabic, San Dionisio Ocotepc Zapotec and Welsh) and asymmetric in also three (Hdi, Musqueam and Dupaningan). Mam is the only VSO language that has both symmetric and asymmetric negative constructions. Perhaps with more than seven VSO languages, the tendency would be clearer. I expect, though, symmetric negative constructions to be the most common type in VSO languages since they are frequent in SOV and SVO languages.

Table (38): Negative construction and word order

Negative Construction	Basic Word order		
	SOV	SVO	VSO
Symmetric	9	6	3
Asymmetric	2	0	3
Symmetric & Asymmetric	0	4	1
Total	11	10	7
	28		

There are many factors that result in asymmetric negative constructions. In the data, negative constructions are mostly asymmetric for one of the following four reasons: First, some languages encode tense by the use of different markers in negatives. This is the case in Japanese and Swahili. Consider the following clauses from Japanese and note that past tense is encoded by *-ta* in affirmatives as in (175.a) whereas in negatives it is signaled by *-katta* as in (175.b) (Nyberg, 2012):

(175) a. Kodomo ga ringo o tabe-te i-ta
 child Nom apple Acc eat-PRG AUX-PST

“The child was eating an apple”

b. Kodomo ga ringo o tabe-te i-na-katta
 child Nom apple Acc eat-PRG AUX-NEG-PST

“The child was not eating an apple”

Second, in some languages, negatives lack tense markers. This is the case in Dime and Hdi. Compare the following clauses from Dime and note that verbs in affirmatives are inflected for tense as in (176), but they are not in negatives as in (177) (Seyoum, 2008):

(176) Nu don-im dex-i-n
 3.SG.M.SUBJ potato-ACC cook-PERF-3
 “He cooked potato”

(177) Na naaki ?ad-kay
 3.SG.F.SUBJ yesterday come-NEG
 “She did not come yesterday”

Third, when the negative marker in the language is an auxiliary verb, the negative construction is more likely asymmetric in that language. This is found in only one language in the data (Dupanangan Agta). In fact, there is a logical relationship between negative auxiliaries and asymmetric negative constructions. That is, negators are considered to be auxiliaries because they are inflected for categories like tense, person, etc. Such categories used to appear somewhere else in affirmatives. The different placement of an inflection between affirmative clauses and their corresponding negatives presents another structural difference between them aside from the presence of the negative marker, and that makes the negative construction asymmetric. As an example, consider the following clauses from Dupanangan Agta and note that in affirmatives, subject agreement inflections appear on the main verb as in (178.a) whereas in negatives, they appear on the negative auxiliary as in (178.b) (Robinson, 2008):

(178) a. Nag-langoy=ka
 COM-swim=1.SG.NOM
 “I swam”

- b. Awan=ak nag-langoy⁴⁷
 NEG=1.SG.NOM COM.AV-swim
 “I did not swim”

Finally, when the language distinguishes two categories of mood (realis and irrealis), it probably has asymmetric negative constructions. This is the case in Moskona and Jahai. In fact, this can be considered as another logical relationship associated with asymmetric negation. That is, irrealis mood is mostly used to indicate that the event is not real (Foley, 1986). Thus, it is appropriate to be used with negated and future clauses since in both of them the event did not occur, at least not yet. Such an inflection presents another difference between non-future affirmatives and non-future negatives, and that makes the negative construction asymmetric. As an example, consider the following clauses from Moskona where non-future verbs do not inflect for irrealis as in (179), but negated verbs must be inflected as in sentence (180) (Gravelle, 2010):

- (179) mif mi-oyka
 1.PL 1.PL-dance
 “We danced”

- (180) bua bi-em-et mar éra
 2SG 2SG-IRL-eat thing NEG
 “You did not eat (anything)”

However, in the data there is an exception for this relationship. Neve’ei is a language that has realis/irrealis distinction; thus, like Moskona, this language should have asymmetric negative construction. Yet, the negative construction in Neve’ei is always symmetric. The reason is the irrealis mood in Neve’ei functions differently. In Moskona, the irrealis mood appears to indicate

⁴⁷ Note that the (=) between *awan* and *ak* does not mean *awan* is a proclitic; it is to indicate that pronouns in Dupanangan Agta are clitics.

the event did not take place. In Neve'ei, on the other hand, it appears to indicate that the speaker views the proposition in the clause as hypothetical not factual. For example, in the following clauses, the verb is inflected for realis whether the clause is negated or not because the speaker considers both clauses as facts (Musgrave, 2007).

(181) At-dedan

3.PL.RL-dive

“They (all) dived”

(182) Nelabut i-se-mah-si

rat 3.SG.RL-NEG-die-NEG

“The rat did not die”

In contrast, every verb in the following text is inflected for irrealis. That is, “at this point of the story, the narrator is providing a hypothetical explanation of how the events, which were previously reported, might have actually taken place” (Musgrave, 2007:50).

walutnen	nabulmens	i	bwe-vwer	bwe-vwer	ba-suv
because	kingfisher	3.SG	3.SG-IRR-come	3.SG.IRR-Actual	3.SG.IRR-settle
do	ran	na'ai	tuan	bwe-vwer	bwi-gilou bwe-dah
hit	Loc	tree	INDF	3.SG.IRR-Actual	3.Sg.IRR-look 3.SG.IRR-go.down
yang	bwe-leh		nurukhum	nge	tuan
and	3.SG.IRR-see	crab		DEM	INDF

“Because the kingfisher would come and actually settle on a tree and he would look down and see one of those crabs”

5. Conclusion

Based on two typological frameworks (Dahl, 1979 and Miestamo, 2007), I consider negation in 28 languages in order to examine the correlation between basic word order and the strategy used in standard negation. The 28 languages are divided into three groups according to their basic word order as follows: 11 SOV, 10 SVO and 7 VSO. As much as possible, I have included languages, in each group, from different language families as well as different geographical areas in order to eliminate the effect of genetic relationships and borrowings.

I have shown that OV languages tend to express negation morphologically, where the negator is an affix, because they tend to be agglutinative and VO languages frequently express negation syntactically, where the negator is an independent morpheme, because they tend to be isolating. I also have shown that symmetric negative constructions are the most common type regardless of basic word order. However, the 28-language pilot sample is not large enough to assert such a tendency, but it might suggest that basic word order plays a role in the way negation is expressed.

The results indicate that uninflected particles are the most common negators in syntactic negation whereas negative auxiliaries are significantly less common (observed only in Dupanangan Agta). However, regardless of basic word order, independent negative morphemes are mostly placed pre-verbally. On the other hand, in morphological negation, negative suffixes and negative prefixes are both common. Circumfixal negation is less common and negative clitics are the least frequent negative markers. Most notably is that irrespective of basic word order, negative affixes are always attached to the verb.

Dahl's (1979) and Miestamo's (2006) are the only classifications for the various strategies used in standard negation cross-linguistically. Therefore, we could unify them in one

typological framework as follows: negative strategies in standard negation can be classified as morphologically symmetric as in Turkish, morphologically asymmetric as in Japanese, syntactically symmetric as in Russian or syntactically asymmetric as in Hdi. That is, negation is either morphological or syntactic according to the negator type and symmetric or asymmetric according to the structural differences found between an affirmative clause and its negative counterpart.

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