

A Preliminary Evidence of Transfer in the Acquisition of Sentential Negation of English in Multilingual Indonesian Children in School Contexts

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ABSTRACT

Bilingual children in Indonesia have continued to develop their trilingual competence by adding English into their linguistic repertoires, in addition to Indonesian as the first language (L1) and Javanese or any other regional languages as the second language (L2). Considering the unique characteristics of third language (L3) acquisition in the way that it requires multidirectional interactions of three language systems, this study aimed at finding an evidence of L1 and L2 transfer in the acquisition of L3 sentential negation. In specific, it examined whether the absence of functional projection in Indonesian and Javanese negations would trigger transfer in the production of English negations, and testing out whether Cumulative Enhancement Model (CEM) worked best to the data. The CEM as one of L3 acquisition models encapsulates that any previous linguistic knowledge available to L3 learners will either enhance L3 learning or remain neutral. The English sentential negations were elicited from the already-available data sets; a limited corpus and in-class writing exercises of primary school learners aged 7-10 years old who were in an International Class Program in East Java, Indonesia where English became the medium of instruction. The findings demonstrated a preliminary evidence of transfer mainly in the absence of functional projections in English sentential negations resulted from a negative transfer of L1 and L2. More importantly, it suggested that the typological proximity of L1 and L2 had supported the cumulative effect in a negative way which was in contrast to the basic principle of CEM in which such collective process should enhance or be neutral when learning L3. Thus, this study has posited a theoretical implication of reconsidering the cumulative enhancement effect of L1 and L2 to the L3 by looking at the possibility of negative transfer. This current study has also imparted a practical implication for L3 teaching and learning with specific regard to English in that teachers can highlight any contrastive features embedded in learners' L1, L2, and L3 to explicitly show the different patterns and uses.

Keywords: Transfer; Sentential Negation; Indonesian multilingual children; L3 Acquisition Models; Cumulative Enhancement Model (CEM)

INTRODUCTION

This paper aims at investigating the acquisition of English (L3) sentential negation by Indonesian (L1) and Javanese (L2) speaking children to seek a preliminary evidence of transfer. In a specific context of L3 syntactic acquisition, most studies have repeatedly looked at adult learners (Antonova-Ünlü & Sağın-Şimşek 2015, Bardel & Falk 2006, Flynn, Foley & Vinnitskaya 2004, García-Mayo & Rothman 2012, Sereno & Jongman 1997), with less attention to younger group of learners (Fallah, Jabbari & Fazilatfar 2016, Gallardo del Puerto 2007, Jaensch 2010). Furthermore, studies on L2/Ln syntax in adulthood tend to be preferred which is in contrast to L2/Ln phonological acquisition (Abdely & Thai 2016). It is in addition to the trends of case-based studies to the group of simultaneous multilingual speakers in natural settings. My study, instead, explores the acquisition of L3 syntax with a focus on sentential negation as experienced by sequential trilingual children in an institutional setting. These young multilingual speakers have established knowledge of Indonesian and Javanese before they were immersed in an English environment at the age of 7.

Language acquisition has always been deemed to be miraculous; Yip and Matthews (2007, p. 5) point out that 'If a child's acquisition of a language is a miracle, then acquiring

two at the same time is doubly so'. In this way, the acquisition of an additional language(s)—apart from the first two—is an even more amazing feat, given the multidirectional interactions between languages in multilingual speakers' cognitive processing. L3 acquisition is, therefore, unique and considerably different from bidirectional relationship between L1 and L2 in bilingual acquisition (Clyne 1997, Cenoz 2001, Herdina & Jessner 2002). Claims stating that the universal characteristics across languages as the underlying factors of similarities in the process of L1/L2/L3 acquisition are still highly valued. However, empirical evidences of transfer have continually been found across different linguistic levels (Badea, 2009).

Considering the immense number of layers of language structures, this study has to limit the scope of investigation to the negation aspect. It is for the reason that Indonesian and Javanese are seen to share a similar sentential negation structure in the way that there is no functional projection including agreement features which is significantly in contrast to the English. Thus, there is a strong tendency of transfer from L1 and L2 in the production of L3 negation.

Pertaining to the complexities that may appear in a multidirectional interaction of L1, L2 and L3, the need to have another look at primary sources of transfer during L3 learning remains crucial. This scientific demand of figuring out key factors of transfer in L3 acquisition has generated three major works; Rothman's (2010) *Typological Primacy Model (TPM)*, Flynn, Foley and Vinnitskaya's (2004) *Cumulative Enhancement Model (CEM)*, and Bardel and Falk's (2006) *L2 Status Factor (L2SF)*. These so-called "L3 acquisition models" are fundamental in uncovering the formula behind the nature of cross-linguistic interactions in trilingual acquisition. Also, they become the point of departure of my study. With regard to research methodology, I refer my work to Perales, Mayo and Liceras (2009) in their thorough observation on the production of L3 English sentential negation in Spanish-Basque speaking children in an institutional setting. Dividing learners into three groups based on the length of learning (four, eight and eleven years of learning), they find that these learners were not aware of tenses and agreement features (*do* and *be*) in the placement of negative marker; instead, they relied more on word order.

There are two specific objectives brought together in this study. Firstly, with special reference to Perales et al. (2009); I predict that the absence of functional projection in the structure of sentential negations of L1 Indonesian and L2 Javanese will expectedly trigger transfer in the production of L3 English negations. Secondly, by referring to Flynn's et al. (2004) CEM; I attempt to re-examine the concept that any previous linguistic knowledge available to L3 learners can interact without regard to the order of acquisition. In other words, the already-developed knowledge of L1 Indonesian and L2 Javanese is such a collective process, so much so that it can enhance the L3 English development or remain neutral.

LITERATURE REVIEW

L3 ACQUISITION MODELS

Williams and Hammarberg (1998) impart several criteria to describe the complexity of L3 acquisition that include typological proximity, cultural similarity, proficiency, recency, and L2 status. Departing from these criteria, scholars have constantly put efforts on the construction of L3 acquisition models.

Rothman's (2010) study is pivotal to the development of L3 acquisition models. The focal point of his proposal is "that third language (L3) transfer is selective, whereby, at least under certain conditions, it is driven by the typological proximity of the target L3 measured

against the other previously acquired linguistic systems” (Ibid p. 107). He proposes the so-called Typological Primacy Model (TPM) that was rooted from a comparative analysis of the two groups of trilingual adult speakers: L1 Italian-L2 English-L3 Spanish speakers; and L1 English- L2 Spanish-L3 Brazilian Portuguese speakers with an analytical focus on an adjectival semantic interpretation where all these languages, except English, share a similar structure. Through this work, he hypothesises that structural similarities—or more specifically typological proximities—are the key aspect that determines the source of transfer in L3 acquisition. A deep understanding towards a principle of cognitive economy has been considered, stating that “the TPM makes reference to the mind’s predisposition to put forth the least amount of effort towards a cognitive task” (Rothman 2015, p. 180).

Investigating the acquisition of relative clauses in L3 English, L2 Russian, and L1 Kazakh in adults and children, Flynn et al. (2004) deliver a different proposal underpinning a cumulative behaviour in language learning. Building upon a Cumulative Enhancement Model (CEM), they indicate that all languages in multilingual speakers’ repertoire are able to enhance the development of subsequent systems in language acquisition or being neutral. Bardel and Falk (2006), on the other hand, put forward an L2 Status Factor in the initial state of L3 syntactic acquisition which is centralised on the idea that L2 takes an exceptional role in filtering L3 to be linguistically influenced by L1. From a careful examination toward the two groups of L3 learners—Swedish and Dutch respectively—with different L1s and L2s background, their analysis on the production of L3 negation reveals that subsequent syntactic structure was transferred from L2, together with a supplementary typological relation. This situation urges the need to consider the prominent role of L2 in determining the source of transfer in L3 acquisition.

Looking briefly at the L3 models above, the language combination in my study may not fit exactly to the TPM and L2SF prototypes. This is because the L1 Indonesian and L2 Javanese share similar negation features, meaning that both can have an equal opportunity to be the source of transfer. Nonetheless, this combination—Indonesian and Javanese as Austronesian and English as Indo-European type of language—can substantially enrich the less studied multilingual pairings (For non Indo-European examples, see Jaensch 2010, Park & Starr 2016, Potgieter 2016) as well as contribute to the wide range of bilingualism research in Asia (Zen 2017). Also, it is in specific reference to Döpke’s (1999, p. 173) line of research, that is to explore a range of language combinations with “varying degree of similarities and differences in the structure of the languages” to point out evidence of “the more complex the structural overlap between languages, the more visible the path of functional differentiation between the languages will be”.

MULTILINGUAL SITUATION IN INDONESIA

To get a glance of how multilingual my participants are, it is necessary to provide brief information on a typical multilingual environment in Indonesia prior to the description of negation structure of each of the languages. In general, Indonesian children acquire Indonesian as the national language, Javanese (or other regional languages) as the regional home language, and English as the foreign language. These languages have multiple functions in everyday language use.

Indonesian was institutionalized as the language of education from kindergarten to university level in 1990; this was a replacement to the previous government regulation indicating that regional languages were used as the medium of instructions in the first three grades of primary school (Musgrave 2014). Moreover, with a significant growth of technology and mobility, Indonesian has undergone a functional shift from a mere school language to a community language. This has also been suggested from a study conducted to

examine language use pattern of school-age children in Indonesia where the finding shows that middle-class families prefer to use Indonesian (Kurniasih in Musgrave 2014). In addition, Zen and Apriana (2015), from their small-scale survey, discover that only less than 30% of respondents use their regional home language in the actual parent-child communication, whereas the larger numbers of families have shifted to Indonesian. For the purpose of the current study, these findings are essential to assure the status of acquisition order of Indonesian as the L1.

Javanese—one of regional languages in Indonesia—has the largest number of native speakers in the country and it is now the twelfth most widely spoken language in the world (Uhlenbeck 1965). As a regional language, Javanese has been re-taught in schools as a compulsory local content subject since the 1993 National Curriculum, even though its speakers have gradually been declining in recent years (Musgrave 2014). The most noticeable yet complex part of Javanese lies in the speech level systems, where it comprises multiple layers of *krama* (the highest level), *madya* (the medium level), and *ngaka* (the lowest level); the forms and usages of these speech levels vary depending on socio-pragmatic aspects. The distinguishing part of the system is not on its grammatical pattern, but a set of vocabulary, as in the followings:

1. Aku wis mangan segane.
 Isg done eat the rice.
 I have eaten the rice.

2. Kula mpun nedha sekule.
 Isg done eat the rice.
 I have eaten the rice.

3. Kula sampun nedha sekulipun.
 Isg done eat the rice.
 I have eaten the rice.

(Musgrave, 2014)

Sentence 1, 2, and 3 have the same meaning, yet are expressed in different speech levels; sentence 1 is in *Ngaka*, 2 is in *Madya*, and 3 is in *Krama*. Apart from these speech-level-based varieties, the use of address terms and other socio-pragmatic markers has also expressed socio-cultural values of the people (Yannuar, Iragiliati & Zen 2017). The Javanese language textbook for primary education is designed to contain all varieties of the speech levels; this is done to accommodate the need for young learners to communicate across different ages and other social aspects of interlocutors. Therefore children will learn proper vocabularies across different speech levels with relatively similar grammatical patterns. In the context of language acquisition, Javanese is said to be the L2 as a result of progressive shift of use toward Indonesian.

The adoption of English as the most preferred foreign language in Indonesia is due to its function as a world-widely lingua franca, bridging languages across different geographical regions in the world with its prestige and power (Lowenberg 1991). English has significantly contributed to the development of Indonesian, especially in the lexico-semantic and pragmatic context, assuming the functional shift of English from a foreign language to an additional language. However, this language was never adopted as an official language—even during the Dutch and Japanese colonialization period—due to the absence of native English speakers in Indonesia.

In an educational context, English in Indonesia has gone through several contrasting phases. Once, this language had become a mandatory instruction starting from junior high school, taking up to 4 hours per week; later, this was increased into 3-7 hours per week in

senior high school (Lowenberg 1991). However, scholars and academicians consider the insertion of English into the National Curriculum of Indonesia is yet unable to reach the expected English proficiency. This is likely due to some problematic factors such as: academic failure and incomplete years of learning, slow progress of vocabulary acquisition, preference of reading translated version of English books even at university level, poor classroom managements and teachers' inadequate proficiency, and obstacles in distributing English textbooks to schools in remote areas (Ibid 1991).

Taking some points to note from the aforementioned problems, some schools with an international class program (ICP) put a rather revolutionary effort to introduce English. One example is the implementation of a partial English immersion program. Here, English is not only learned as a school subject, but also immersed in both English and non-English (e.g. science and mathematics) classrooms (Rachmajanti, Zen & Apriana 2017). The use of English as the language of instruction is in a purpose of exposing students with a considerable amount of English input, even though the challenge of receiving non-native input remains present. I refer the term 'non-native input' here to the context where English teachers are typically non-native speakers of English and to textbooks that are developed by non-native speakers too.

NEGATION AND NEGATION ACQUISITION

ENGLISH SENTENTIAL NEGATION

As illustrated by Döpke (1999), in English, a negation marker (or particle) becomes the head of its own functional projection. In this construction, auxiliaries and modal verbs appear to the left of the negation; the main verb remains in situ and appears to the right of the negation (Sentence 4). In the absence of an auxiliary or modal verb, the do-insertion takes place because the main verbs cannot rise overtly (Sentence 5).

4. The teddy cannot eat broccoli.
5. The teddy does not eat broccoli.

In interrogative sentences, if a negation is contracted, it moves together with the verb (Sentence 6). However, if it is not contracted, the negation marker remains in its original position (Sentence 7).

6. Can't the teddy eat broccoli?
7. Can the teddy not eat broccoli?

INDONESIAN SENTENTIAL NEGATION

According to Kroeger (2014), sentential negation in Indonesian is expressed by two distinct negation markers: internal (to negate verbal predicates) and external (to negate nominal predicates). The negation marker *tidak* is used when the predicate is verbal (Sentence 8) or adjectival (Sentence 9); and in most cases with predicative PPs (Sentence 10). Meanwhile, the special negation marker *bukan* is used when the predicate is nominal (Sentence 11). *Bukan* can still be used to negate verbal clauses in certain restricted contexts (Sentence 12).

8. Mereka *tidak* menemui kami.
 3pl Neg see 1pl.excl
 'They didn't come to us.'
9. Saya *tidak* haus.

	1sg	neg		thirsty.					
				‘I am not thirsty.’					
10.	Penelepon	tidak	perlu	tahu	bahwa	anda	sedang	tidak	di rumah.
	Telephoner	neg	need	know	that	you	cont.	neg	at house
				‘Callers do not need to know that you are not at home.’					
11.	Mereka	<i>bukan/*tidak</i>	para	pekerja	tambang.				
	3sg	neg	pl	miner					
				‘They aren’t miners.’					
12.	Dia	<i>bukan</i>	menangis,	tetapi	hanya	terharu.			
	3sg	neg	cry	but	only	felt touched			
				‘He is not crying, but is only feeling very touched.’					

It is important to underline that the negation *bukan* in clauses with nominal predicates (Sentence 12) is obligatory for a sentence to be grammatically correct (Kroeger 2014).

JAVANESE SENTENTIAL NEGATION

A shared syntactic feature of Javanese and Indonesian lies on its word order expressing subject–verb–object (SVO) with no copulative verb and non-inflected verbs to mark grammatical aspects including tense, person, and number (Uhlenbeck 1965). Instead, auxiliary words such as *aja* (don’t), *durung* (no, not yet), *isih* (yes, still), *ora* (I don’t or no it isn’t) or *wis* (yes I have, or yes it is) function as aspect markers (Musgrave, 2014). Among these words, *aja*, *durung*, *duduk*, and *ora* stand as lexicalized negation markers and do not possess any syntactic projection as illustrated in the followings:

13.	Aku	ora	luga	menyang	Sala
	1sg	not	go	to	Sala_the city
				‘I don’t go to the Sala city.’	
14.	Ibu	ora	lunga	menyang	Sala
	Mother	not	go	to	Sala_the city
				‘Mother doesn’t go to the Sala city.’	

It is worth mentioning that the change of Phi-feature of *aku* (I, first person singular in Sentence 13) to *ibu* (mother, third person singular in Sentence 14) does not motivate any changes to the auxiliary or verb forms.

To sum up, English, Indonesian, and Javanese demonstrate similar and different sentential negation characteristics as extracted in Table 2 below.

TABLE 2. The Typological Characteristics of Negation

Languages	Typological Characteristics	Examples	
English	<ul style="list-style-type: none"> ▪ Syntactic negation ▪ Two negative markers: no & not ▪ Motivating a NegP projection ▪ Between Tense Phrase (TP) and subject agreement projection 	1) <i>John does not (doesn't) walk to school</i> 2) <i>I do not (don't) walk to school</i> 3) <i>She is not a teacher.</i>	
	Indonesian & Javanese	<ul style="list-style-type: none"> ▪ Semantic negation ▪ Two negative markers; tidak, bukan, & jangan (Indonesian), ora & dhudhu' (Javanese) ▪ Independent lexical entries ▪ Pre-verbal 	4) <i>Budi tidak pergi ke sekolah</i> <i>Budi not go to school</i> <i>Budi doesn't go to school.</i> 5) <i>Aku tidak pergi ke sekolah</i> <i>I not go to school</i> <i>I don't go to school.</i> 6) <i>Siti ora lungo menyang Sala</i> <i>Siti not go to Sala</i> <i>Siti doesn't go to Sala.</i>

(Döpke 1999, Kroeger 2014, Uhlenbeck 1965)

STAGES OF ENGLISH SENTENTIAL NEGATION

Drozd (1995) argues that “Negation is one of the earliest functions to emerge in child languages” and that the word “*no*” in English is normally the first negative expressions to appear in children’s speech”. He proposes three stages of English negation development in children as follows.

1) Stage 1

In a non-anaphoric sentential negation, commonly known as ‘pre-sentential negation’, the negation marker *no* appears outside of an utterance, assuming that the negation is adjoined to the VP (Sentence 15). An anaphoric negation, on the other hand, posits the default placement of *no* in front of an utterance; this is used to respond to the previous discourse. Children omit the subject when constructing this type of sentential negation which therefore is labelled as an external negation.

15. No the sun shining.
No sit there
Not a teddy bear
No fall!
Wear mitten no

2) Stage 2

The second stage is indicated by a negation being placed: 1) sentence-internally before the verb; and 2) after the subject, assuming a more mature developmental stage of syntactic acquisition (Sentence 16 & 17). Scholars often use the term ‘internal sentential negation’ to refer to these negative markers (*no*, *not*, *can’t*, and *don’t*). However, the inflection has not been acquired yet; so it appears that the negation markers *can’t* and *don’t* behave like lexical variants of *no/not*, showing the inability of putting tense and agreement markers to it (the auxiliary system is not available yet in this stage).

16. I not copy cat.
17. I no taste them.

3) Stage 3

In this stage, *do*-support is already available, expressing a positive signal of auxiliary system development (Sentence 18 and 19). When reaching this stage, children are said to be able to construct adult-like sentential negation very productively.

18. I don’t copy cat
19. She doesn’t taste them

Looking at the different patterns of negation between English and Indonesian/Javanese, it is arguably important to take a note on the typology of negation, as proposed by Thornton and Tesan (2012, p. 375-376);

- a) Phase I: negation is only expressed by a single negative marker that is attached to the finite verb.
- b) Phase II: a negative marker that is attached to the finite verb becomes phonologically too weak to express negation by itself. Additionally, a second negative adverb becomes optionally available.
- c) Phase III: sentential negation is obligatorily expressed by a negative marker that is attached to the finite verb and an adverbial negative marker.
- d) Phase IV: a negative adverb is the obligatory negation marker and the use of the negative marker that is attached to the finite verb becomes optional.

- e) Phase V: a negative adverb is the only available negative marker. The negative marker that is attached to the finite verb is no longer available.
- f) Phase VI: a negative marker is available in two forms: it can appear either as a negative adverb or as a negative marker that is attached to the finite verb, though sometimes it can appear simultaneously.

METHOD

This current study is a part of a preliminary investigation of cross-linguistic transfer in the acquisition of morpho-syntactic aspects of L3 (English) as experienced by Indonesian-Javanese bilingual children. I utilized the already-available datasets (i.e. there were no experimental processes conducted) and specifically elicited parts where the sentential negations of English were produced.

The first data set was a Corpus of Bilingual Language (CBLING); it is a learner corpus constructed from in-class composition writings under one common topic “My Favourite Toys”. This corpus collected a written production of Grade 1 – 5 learners from two primary schools in *Malang* East Java Indonesia: *Surya Buana Malang* (a private school) and Primary Laboratory School of *Malang* (a university-affiliated school) (Apriana, Kadarisman & Yaniafari, 2017). I examined the learner corpus from Primary Laboratory School of *Malang* as it contained the English written production of learners in ICP classes. Their involvement in this type of class was substantial as this program offered a larger amount of English input compared to the regular classes. In this class, English functioned as a medium of instruction in English, Science, and Mathematics classes with a total of 6-hour instruction and intensive use of English in a day. Additionally, the ICP was affiliated to Cambridge Assessment International Education, where classes were taught by the Cambridge-certified Indonesian teachers (Rachmajanti, Zen & Apriana 2017). The chosen part of CBLING contained 214 compositions with 9093 tokens. 29 sentences were identified to contain the negation markers *no* and *not* based on concordance analysis. The second data set was regular in-class writing exercises conducted during the second semester of Academic Year 2016/2017 that was collected by the English teachers of ICP classes. From this learners’ workbook, 141 sentences were found with the negation marker *no* and *not*. The two data sets were different in that the first was more on a free-writing task, while the second was a controlled one.

Thus, I analyzed 170 sentential negations in total from a naturally occurring written production. Aiming to obtain a ‘natural’ production of English negation; I, therefore, did not design any experimental task to elicit the targeted sentences. The data from in-class exercises as well as CBLING were considered as a natural language use because the participants were not directed to produce particular linguistic pattern so that their negation production expressed their actual understanding towards this grammatical concept. I assumed that their natural language production would provide interesting evidences of initial stage of L3 negation acquisition in its relation to multiple linguistic backgrounds of these multilingual speakers.

FINDINGS AND DISCUSSION

As aforementioned, I work to find (1) a preliminary evidence of transfer from L1 (Indonesian) and L2 (Javanese) to the L3 (English) as triggered by the absence of functional categories and projections in the production of sentential negations; and (2) whether or not

the Cumulative Enhancement Model (CEM) work best to my data as a cumulative effect of shared negation structures embedded in L1 and L2 may interact together to enhance L3 learning or be neutral.

EVIDENCE OF TRANSFER IN THE PRODUCTION OF L3 ENGLISH SENTENTIAL NEGATION

I use morpho-syntactic dissimilarities of L1/L2 and L3 negation as a starting point to predict a cross-linguistic transfer. In English, the negation marker *not* becomes the head of its own functional projection, with auxiliaries and modal verbs placed before the main verb; in the case where auxiliaries or modal verbs are absent, do-insertion takes a place (Drozd 1995). On the other hand, in Indonesian and Javanese, the negation *tidak/bukan/ora/duduk* seems to behave as independent lexical items, with the placement of modal verbs after negation markers; also, do-support is absent as there are no copulative verbs in both languages. The data analysis as shown in Figure 1 indicates that sentences with the absence of Functional Projection (FP) appeared more frequently than the presence of it in both data sets.

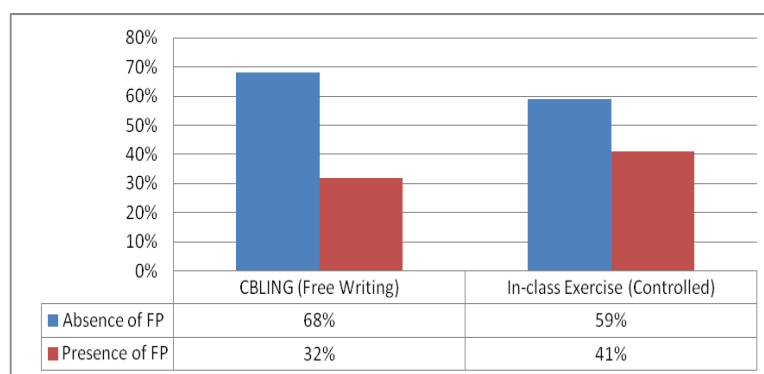


FIGURE 1. Sentential Negation in CBLING and In-class Exercise

I found the participants produced typical sentential negations as follows:

20. But, sometimes Amira not participate (*Grade 4 student*)
21. Some times I not play with my friend (*Grade 3 student*)
22. I lost because I not gol (to score a goal) (*Grade 2 student*)

In sentence 20, 21, and 22, the negation *not* is placed pre-verbally, which is syntactically correct in the three languages; however, a missing do-support violates the functional projection of English negation. This absence of do-support arguably resembles Indonesian/Javanese construction where there is no grammatical obligation to use it when auxiliaries or modal verbs are absent. It becomes more obvious by translating sentence 21 into Indonesian (sentence 23) and Javanese (sentence 24) that they signal L1/L2 transfer.

23. Sekali waktu, aku tidak bermain bersama temanku (Indonesian)
 Sometimes I not play with my friend
 Sometimes, I do not play with my friend
24. Kadan-kadang aku ora dolanan karo koncoku (Javanese)
 Sometimes I not play with my friend
 Sometimes, I do not play with my friend

Furthermore, Indonesian/Javanese type of negations as shown in sentence 23 and 24, expresses a semantic negation where the negative markers *tidak* and *ora* are claimed to be a

negative adverb; in this context, it behaves as a negative operator without any syntactic operation.

A further prediction of L1/L2 transfer can be seen from the production of agreement features that the evidence appears as follows;

25. My animal don't look real. (*Grade 3 student*)
26. It don't have any wings. (*Grade 3 student*)
27. It also don't have any fur. (*Grade 3 student*)

The Phi-features of subject *my animal* (Sentence 25) and *it* (Sentence 26 and 27) require certain agreement to the appointed verbs; I assume the absence of subject-verb agreement in the above sentences as a result of L1 and L2 transfer, as there are no inflected forms to mark grammatical aspects in Indonesian and Javanese (Uhlenbeck, 1965). In interpreting the data, I proposed two possible explanations: 1) learners were aware of different grammatical patterns of L1 Indonesian, L2 Javanese, and L3 English when constructing sentential negations, as they were able to apply the 'do-support' system; 2) they were completely unaware of the syntactic projection embedded within the sentential negation of English, but treated the negation marker of *not/didn't/don't* simply as lexical items expressing negation. The second point is established based on the fact that participants tended to consider these negation markers to behave like a semantic projection which in Indonesian and Javanese it is unnecessary to undergo any syntactic operation.

PROBABLE FACTORS OF CROSS-LINGUISTIC TRANSFER IN L3 NEGATION ACQUISITION

Referring to the above evidences, I argue that the strongest predictor underlying factors of transfer was the typological differences between the learners' L1/L2 and L3, particularly in the area of negation structure; in L1 and L2, negation is marked as a mere lexical item and does not have any syntactic projection, whereas this syntactic operation in L3 English play a significant role. Thus, in this very specific case, the absence of 'do-support' system and agreement features, including inflected verbs in both L1 and L2, did not facilitate L3 learning that may naturally stimulate negative transfer during L3 learning and acquisition.

In determining which L3 acquisition models accurately describe the data of this current study, I maintain that it may not work pretty well with the TPM model. The nature of L1-L2 pairing differs from the language combinations of any cases that have been brought up by the TPM. This L3 model claims that L3 initial transfer is selective; it selects a language, either L1 or L2 that has the closest syntactic properties with the target language (Rothman, 2010). Having this typological-based selection in mind, it is important to emphasise that L1 and L2 should be typologically different, at least in certain linguistic aspects under investigation, in order for the TPM model to work; L3 can then select which of the two different systems are the most closely similar. In my study, L1 Indonesian and L2 Javanese are typologically similar, both historically and structurally. The two belong to the Austronesia language family whose verbs are typically not inflected to mark grammatical aspects (including agreement features) with the absence of 'do-support' system (see Sentence 23 and 24). The L3 English in our data could not select a specific source of transfer, but has to take both languages.

Predicting a cumulative effect of L1 Indonesian and L2 Javanese in influencing L3 English, this study supports a particular part of Flynn's et al. hypothesis maintaining that "experience in any prior language can be drawn upon in subsequent acquisition" (2004, p. 13). In other words, both L1 and L2 are equally taking a significant part in the subsequent language acquisition, thus any previous linguistic knowledge has the possibility to facilitate L3 learning. The statement becomes more convincing as the two previous linguistic systems

are typologically similar. I found that when using L1 and L2 negation systems as the underlying principle of L3 learning, the negation productions presented in the data became very predictable; it looked a lot like learners' L1 and L2 type of sentences, seen in the absence of functional categories and projection.

However, my evidence possibly stood in contrast to the CEM in the way that the collective knowledge of L1 and L2 reinforce a negative transfer when learning L3. While on the other hand, CEM does not provide any possibility for negative transfer to occur. The prior linguistic systems can only be neutral or facilitative. Here I assume that learners have a conclusive knowledge of negation structure in L1 and L2, with little to no positive transfer effects because of the typologically similar systems; L3 negation learning still follows the established route of acquisition, but faces a challenge in morpho-syntactic systems. Therefore, I believe my findings will shed a light on the fact that when the L1 and L2 share typological similarities, these prior linguistic knowledge are unable to be either neutral or facilitative, but to significantly interfere the acquisition process of L3.

CONCLUSION

In conclusion, the findings confirmed a prediction that the absence of functional categories and projections in L1 Indonesian and L2 Javanese negation was seen to significantly trigger a transfer to the L3 English. The typological proximity of L1 and L2 had also yielded a more challenging L3 acquisition process because the shared syntactic features of the two languages had accumulated prior to the L3 learning. In this study, this accumulation process had predicted a strong negative transfer of both the L1 and L2 to the L3 production as I found retention of production errors in the placement of copulative verbs and subject–verb agreement across different grades of learning. The prediction, therefore, partly supported the CEM in regards to the fact that both the L1 Indonesian and L2 Javanese possess equal opportunities to be the source of L3 English transfer. However, the findings stood against the CEM as the structural proximities of L1 and L2 had become the driving force of negative transfer in the acquisition of sentential negation of L3 English which does not considerably confirm the underlying principle of CEM.

The findings have imparted a theoretical implication particularly in pursuing further thorough examination on the extent of a cumulative process of L1 and L2 in L3 learning and acquisition where the previous hallmark was said to be either neutral or facilitative. The findings of this study would practically be beneficial for L3 teaching and learning with special reference to English in which teachers can highlight contrastive features among three languages to explicitly show the different patterns and uses.

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REFERENCES

- Abdely, A.A. & Thai, Y.N. (2016). Learning English vowels by Iraqi EFL learners: Perceived difficulty versus actual performance. *3L: The Southeast Asian Journal of English Language Studies*, 22(1), 1-18.
- Apriana, A., Kadarisman, E. & Yaniafari, R.P. (2017). *Building a corpus on children's written production*. (Unpublished research report, State University of Malang, Indonesia).
- Antonova-Ünlü, E. & Sağın-Şimşek, Ç. (2015). The use of verbal morphology in Turkish as a third language: The case of Russian–English–Turkish trilinguals. *International Journal of Bilingualism*, 19(3), 347–362. <http://doi.org/10.1177/1367006914526953>
- Badea, O. (2009). Acquisition vs. Learning of a Second Language: English Negation. *L'acquisition et L'apprentissage D'une Langue Étrangère: Le Problème de La Négation Dans La Langue Anglaise.*, 5(1), 89–94. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=47556508&lang=es&site=ehost-live>
- Bardel, C. & Falk, Y. (2006). The role of the second language in third Language acquisition: The case of Germanic syntax. *Second Language Research*, 23(4), 459–484. Retrieved from <http://eric.ed.gov/?id=EJ778032>
- Cenoz, J. (2001). The effect of linguistic Distance, L2 status and age on cross-linguistic influence in third language acquisition. In J. Cenoz, B. Hufeisen, & U. Jessner (Eds.), *Cross-linguistic influence in third language acquisition: Psycholinguistic perspectives* (pp. 8–19). Clevedon, UK: Multilingual Matters Ltd.
- Clyne, M. G. (1997). Some of the things trilinguals do. *International Journal of Bilingualism*, 1(2), 95–116. <http://doi.org/10.1177/136700699700100201>
- Döpke, S. (1999). Cross-linguistic influences on the placement of negation and modal particles in simultaneous bilingualism. *Language Sciences*, 21(2), 143–175. [http://doi.org/http://dx.doi.org/10.1016/S0388-0001\(98\)00021-7](http://doi.org/http://dx.doi.org/10.1016/S0388-0001(98)00021-7)
- Drozdz, K. F. (1995). Child English pre-sentential negation as metalinguistic exclamatory sentence negation. *J Child Lang*, 22(3), 583–610. <http://doi.org/10.1017/S030500090000996X>
- Fallah, N., Jabbari, A. A. & Fazilatfar, A. M. (2016). Source (s) of syntactic cross-linguistic influence (CLI): The case of L3 acquisition of English possessives by Mazandarani – Persian bilinguals. *Second Language Research*, 32(2), 225–245. <http://doi.org/10.1177/0267658315618009>
- Flynn, S., Foley, C. & Vinnitskaya, I. (2004). The Cumulative-Enhancement Model for language acquisition: Comparing adults' and children's patterns of development in first, second and third language acquisition of relative clauses. *International Journal of Multilingualism*, 1(1), 3–16. <http://doi.org/10.1080/14790710408668175>
- Gallardo del Puerto, F. (2007). Is L3 phonological competence affected by the learner's level of bilingualism? *International Journal of Multilingualism*, 4(1), 1–16. <http://doi.org/10.2167/ijm042.0>
- García-Mayo, M. D. P. & Rothman, J. (2012). L3 morphosyntax in the generative tradition. In *Third Language Acquisition in Adulthood*. <http://doi.org/10.1075/sibil.46.04pil>
- Herdina, P. & Jessner, U. (2002). *A dynamic model of multilingualism: perspectives of change in psycholinguistics*. Clevedon, UK: Multilingual Matters Ltd.
- Jaensch, C. (2010). L3 acquisition of German adjectival inflection: A generative account. *Second Language Research*, 27(1), 83–105. <http://doi.org/10.1177/0267658310386646>
- Kroeger, P. (2014). External negation in Malay / Indonesian. *Language*, 90(1), 137–184. <http://doi.org/10.1353/lan.2014.0000>
- Lowenberg, P. H. (1991). English as an additional language in Indonesia. *World Englishes*, 10(2), 127–138. <http://doi.org/0883-2919/91 S3.00>
- Musgrave, S. (2014). Language shift and language maintenance in Indonesia. In *Language, Education and Nation-building* (pp. 87–105).
- Park, M. & Starr, R. (2016). The role of formal L2 learning experience in L3 acquisition among early bilinguals. *International Journal of Multilingualism*, 13(3), 274–291. <http://doi.org/https://doi.org/10.1080/14790718.2015.1088544>
- Perales, S., Mayo, M. del P. G. & Licerias, J. M. (2009). *The acquisition of L3 English negation by bilingual (Spanish/Basque) learners in an institutional setting*. *International Journal of Bilingualism* (Vol. 13). <http://doi.org/10.1177/1367006909103527>
- Potgieter, A. P. (2016). Lexical and grammatical development in trilingual speakers if isiXhosa, English and Afrikaans. *South African Journal of Communication Disorders*, 11. <http://doi.org/10.4102/sajcd.v63i2.141>
- Rachmajanti, S., Zen, E. L. & Apriana, A. (2017). Mapping the framework of immersion program at the Laboratory Primary School of Universitas Negeri Malang, Indonesia. *The New English Teacher*, 11(2), 19–39.
- Rothman, J. (2010). L3 syntactic transfer selectivity and typological determinacy: The typological primacy model. *Second Language Research*, 27(1), 107–127. <http://doi.org/10.1177/0267658310386439>

- Rothman, J. (2015). Linguistic and cognitive motivations for the Typological Primacy Model (TPM) of third language (L3) transfer: Timing of acquisition and proficiency considered. *Bilingualism: Language and Cognition*, 18(2), 179–190. <http://doi.org/10.1017/S136672891300059X>
- Sereno, J. A. & Jongman, A. (1997). Processing of English inflectional morphology. *Memory & Cognition*, 25(4), 425–437.
- Thornton, R. & Tesan, G. (2012). Sentential negation in early child English. *Journal of Linguistics*, 49(2), 367–411. <http://doi.org/10.1017/S0022226712000382>
- Uhlenbeck, E. M. (1965). Some preliminary remarks on Javanese syntax. *Lingua*, 15, 53–70.
- Williams, S. & Hammarberg, B. (1998). Language Switches in L3 Production: Implications for a Polyglot Speaking Model. *Applied Linguistics*, 19(3), 295–333. <http://doi.org/10.1093/applin/19.3.295>
- Yannuar, N., Iragiliati, E. & Zen, E. L. (2017). Bòsò Walikan Malang ’ s Address Practices. *GEMA Online. Journal of Language Studies*, 17(1), 107–123.
- Yip, V. & Matthews, S. (2007). *The bilingual child. Early development and language contact*. Cambridge: Cambridge University Press.
- Zen, E. L. & Apriana, A. (2015). Contributing factors toward first and second language acquisition: A manifestation of Krashen’s affective filter hypothesis. In R. N. Indah & E. Toyib (Eds.), *Engaging linguistics and literature: Perspectives and insights beyond the curriculum* (pp. 256–264). Malang: UIN Malang Press.
- Zen, E. L. (2017). A close look at bilingualism research in asia. *Indonesian Journal of Applied Linguistics*, 7(2), 90–100.