The Locative Constructions in Frog Story Narratives: A Comparative Study between Surinamese Javanese and Java Javanese

Master's Thesis

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Abstract

This Master's thesis reports on a comparative study between the Heritage speakers of Javanese in Suriname and Homeland speakers of Javanese in Java Island, Indonesia, in regard to the use of locative constructions. Where the results show significant differences between the two varieties, an in-depth analysis will be carried out to examine whether they can be explained on the account of language contact.

At the end of the nineteenth century, around 33,000 Javanese people were brought to Suriname, South America, as contract workers under the Dutch colonial rule. These immigrants have tried to maintain the use of their Homeland language, i.e. Java Javanese, in their daily life. However, the language soon underwent changes as they gradually adapted to the grammar of the dominant languages with which they were in contact, namely Dutch and Sranantongo, into the grammar of their Homeland language. As a result, a new variety of Javanese emerged, i.e. Surinamese Javanese. It is interesting, therefore, to examine the possibility of divergence between the two varieties, as well as convergence between the Heritage variety and the contact languages.

The result of the quantitative analysis of the data shows that the two varieties have both similarities and differences in regard to the use of locative constructions. The similarity is manifested in the way two varieties have similar preferences toward some particular constructions in expressing movement and position description. They are different in that the Surinamese Javanese (i) use constructions with multiple motion-verbs more frequently; (ii) use more simple constructions for both movement and position description; (iii) overgeneralize the use of general locative marking; and (iv) use different variants of path-expressing preposition in expressing source movement-type locative constructions.

It is assumed that those differences are the outcomes of both external processes, i.e. cross-linguistic influence from the contact languages, and internal processes, i.e. the universal principle of language development in contact settings favoring a simplification. Phenomenon (i) may be better linked to the former in that the interference results in the change in frequency, while (ii) is likely to result from the combination between the two processes. Phenomenon (iii) results from the contact in that the influence leads to grammatical reanalysis. As for (iv), it may be rooted in the different type of input acquired by the Heritage speakers. From these findings, it is evident that language contact has become the source of divergence between the two varieties, and at the same time convergence between Surinamese Javanese and the contact languages.

CHAPTER 1. INTRODUCTION

1.1 Background of the Study

Language change is an inevitable result of long-term contact between speakers of different languages. This kind of change, categorized as *contact-induced change,* refers to any change that would have been less likely to occur without the materialization of contact between languages (Thomson, 2001: 62). Previous researchers have discovered that the South American nation of Suriname holds an important role in the investigation of the aforementioned topic (Heine & Kuteva, 2003; Borges, 2013; Lefebvre, 2011; Borges, 2014; Borges, 2015; Buchstaller et al., 2014; Yakpo & Muysken, 2014). Yakpo & Muysken (2014: 102) mention that Suriname has been represented as a "laboratory of language contact" where various contact schemes between diverse languages with distinct typologies have resulted in compelling language phenomena. One of the contact schemes contributing to the phenomena is between the Javanese immigrants and other groups in Suriname.

The Javanese demographic coming to Suriname as contract workers have undergone both language maintenance and language shift. By the former, it means that the Javanese immigrants in Suriname try to maintain the use of their Homeland language, i.e. Java Javanese, whereas by the latter it means that at same time they gradually adopt the dominant languages with which they are in contact, i.e. Dutch and Sranantongo (Yakpo et al., 2015). According to the last census in 2010 by *Nederlandse Taalunie* (the Dutch language standardizing agency) on home languages (Kroon & Yagmur, 2010:186 in Yakpo et al, 2015), there are 3,497 Surinamese participants who select Javanese as their home language, which comprises 15.4% of the whole participants. Yet, such a number is often considered to be misleading as extended interviews show that many participants do have a high proficiency of Javanese, but do not want to identify themselves to be part of the aforementioned group (Yakpo et al., 2015: 178). As the consequence of those two language phenomena in a contact setting, a new variety of Javanese emerges, namely the Surinamese Javanese. Present research is interested in comparing this new variety, Surinamese Javanese, as spoken in the Suriname, to its Homeland variety, Java Javanese, as spoken in Java, Indonesia.

Previous studies use the term *Homeland variety* and *Heritage variety* in referring to the two distinct language varieties (Aalberse & Moro, 2014; Nagy & Kochetov, 2013; Moro, 2016; Nagy 2016). There has been recently growing interest in the examination of how 'divergent' the Heritage

variety is from its Homeland variety as well as how 'convergent' the Heritage variety is from the dominant language of the country (Polinsky, 2006, and Laleko, 2010 for Homeland and Heritage Russian; Backus, 1996, and Valk, 2015 for Homeland and Heritage Turkish; Huwaë, 1992, and Moro, 2016 for Homeland and Heritage Ambon Malay). As for Homeland and Heritage Javanese, there have been little documentation despite the increasing attention for these varieties. The work by Lestiono (2012) and Villerius (2017) are to the present day the only systematic studies done analyzing the development of Javanese varieties in Suriname. Those two studies show that the Heritage variety of Javanese diverges from the Homeland variety concerning the use of constructions with multiple motion-verbs in describing the motion events. On this account, the preference for the aforementioned constructions is higher for the Heritage group. This phenomenon is assumed to root from cross-linguistic interference from the contact language, which also favors the constructions with multiple motion-verbs. In addition to the expression of motion events, it is also evident that the interference has also influenced the phonological system and constituent word-order of the Heritage group (Villerius, 2017). Another study of the Javanese Heritage variety is the Surinamese Javanese-Dutch dictionary by Vruggink (2011) which contains 1,028 loanwords in Surinamese Javanese; 548 of which are of Dutch origin, 469 are of Sranan origin, and 11 are of Surinamese origin. The current research, therefore, attempts to present additional data, which may broaden the understanding of Surinamese Javanese by analyzing a different topic, namely the use of spatial relations, specifically about the use of locative constructions.

Despite numerous works conducted on the topic of language and space, it is only in the last decade that researchers have started to examine non-Indo-European languages (Cablitz, 2006: 4). This minor concern is rooted in the concept of universality of space (Landau&Jackendoff, 1993 in Cablitz 2006: 3). Those who adhere to this idea, thus, assume that the study on Indo-European languages is a valid basis from which generalizations could be made for all languages (Landau & Jackendoff, 1993 in Cablitz 2006: 1). This conception has stirred up many disputes from the linguistic community as they have found out that in various languages, spatial relations are expressed distinctly from well-studied European languages (Levinson, 1997; Palmer, 1999). Palmer (1999: 22) therefore emphasizes the importance of further analysis on "space and spatial reference" in many more less-studied non-Indo-European languages. This study aims to fill the gap by analyzing a language from this category, namely Surinamese Javanese, in terms of the use of locative expressions.

Previous findings have shown that sustained contact has led to a structural change in that the speakers of Heritage variety intensify particular structures which they frequently use with the

speakers of the dominant language (Doğruöz & Backus, 2007: 186). Speakers of the Heritage variety develop a new code in their language in an effort to enhance any "inherent structural similarities" between the languages in contact (Bullock, 2004: 91). This code, however, is mostly based on existing forms in the dominant language resulting in a greater resemblance of the Heritage variety toward the dominant language in contact (Johanson, 2002 in Moro 2006: 11). Johanson (2002: 41) has argued that structural change could occur in any linguistic element which seems to be "more attractive than other [ones]". Yakpo and Muysken (2014) conducted a comparative study from a corpus of narrative texts in Sarnami, the Indian diaspora language in the Caribbean, and its Indian sister languages, Bhojpuri and Maithili, to examine the occurrence of contact-induced change. The result showed a significant difference in the frequency of word orders between those two related languages, in that Sarnami speakers carry a much higher frequency of the SVO (Subject Verb Object) construction than the sister languages (Yakpo & Muysken, 2014: 131). It is claimed that sustained contact with Sranan and Dutch has influenced this preference (Yakpo & Muysken, 2014: 131). Moro (2016) found a similar shift of frequency in terms of the linear order of demonstratives for Heritage speakers of Ambon Malay in the Netherlands. In this regard, when the Heritage group is presented with two options of the order, i.e. pre-nominal (Demonstrative-Noun) and post-nominal demonstrative (Noun-Demonstrative, they show a stronger preference for the first order since the option is also possible in Dutch (Moro 2016: 116).

Prior research has also found that contact-induced change is manifested in the way spatial relations are expressed. Yakpo et al. (2015) looked at Dutch and Sranantongo in respect to the usage of the aforementioned topic and found that locative constructions in contemporary Sranantongo bear resemblance to its counterpart in Dutch (Yakpo et al., 2015: 183). An earlier study reports that Sranantongo allows both postpositional and prepositional structures to convey spatial expressions; yet this research has discovered that the trend has shifted in that postpositional structures becomes less productive (Yakpo et al., 2015: 185). The alteration is said to result from Dutch influence in which the prepositional construction becomes the only option (Yakpo et al., 2015: 185). Based on these previous findings, the author of this research expects to discover differences regarding the usage of locative constructions between Surinamese Javanese and its Homeland variety, Java Javanese. It is also hypothesized that the difference will be manifested in the way certain constructions are used more frequently than the other. This shift in frequency is assumed to be the result of speakers' preference in using shared construction or element existing in the two dominant languages in contact, namely Sranantongo and Dutch.

1.2 Research Questions

Based on the previous background, the research questions are formulated as follows: how do Surinamese Javanese and Java Javanese express locative constructions? If any differences take place, could it be explained on the account of language contact?

1.3 Aims of the Study

The aims of the study will be divided into general and specific aims, in which the detail can be seen as follows:

1.3.1 General Aims

In general, this study aims to compare how the locative construction is expressed in Heritage Surinamese Javanese, as spoken in the Suriname, to its Homeland variety, as spoken in Java, Indonesia.

1.3.2 Specific Aims

More specifically, this study attempts to look for any possibility for the divergence from the Homeland variety and convergence toward the dominant language, Sranantongo and Dutch, by focusing on this specific area of Heritage Surinamese Javanese grammar and providing quantitative analysis of the observed patterns.

1.4 Scope of the Study

This study takes the notion of locative construction as its main focus. This topic will be specifically discussed under the domain of language contact as the explanatory variable of the occurrence of shifting usage on the aforementioned topic within two related languages. In addition, the analysis of this particular construction will be based on the data from oral narrative texts.

CHAPTER 2. LITERATURE REVIEW

2.1 Theoretical background of language and space research

2.1.1 Basic Conceptualization

The phenomenon of space has become a major discussion topic in various scientific fields. Those disciplines have predominantly tried to conceptualize what exactly *space* means as well as what basic elements it consists of. Concerning this issue, the linguists focus mainly to examine how "we linguistically refer to the perceptual space" (Cablitz, 2006: 211). The viewpoint suggests that spatial knowledge and human cognition are somehow linked to each other in that humans' experience with a particular world gives significant impact toward the way they express themselves by the use of specific spatial expression (Levinson, 1997, in Cablitz, 2006: 214). As spatial knowledge is claimed to originate from cognitive representation, it possesses a basic structure which is universally encoded in all languages despite the fact that the aforementioned structure is distinguished by a great variation (Cablitz, 2006: 212). The variation is inevitable because every human has their own subjectivity in conceptualizing what they have experienced (Cablitz, 2006: 212). On this account, the term *spatial reference* is used to specify a spatial relationship between two objects (Cablitz, 2006: 217). The spatial relationship itself is marked by another characteristic, i.e. *relationality,* in which a particular speaker describes a location by relating it to another location which is recognizable to the addressee through the use of the expressions such as *under* or *in front of* (Klein, 1990: 11, in Cablitz 2006: 218).

Present research concerns mainly to investigate how spatial reference is expressed in Surinamese Javanese and Java Javanese, i.e. how the location of one entity is described in regard to the location of another entity, and how location is conceptualized in both languages by the means of linguistic constructions. Specifically, the attention is drawn to examine whether or not similar compositional rules exists as those two related languages construct the locative expressions.

2.1.2 Talmy's topology on language and space

Talmy's topology is selected in the present research to be the main framework for analyzing the locative constructions in language varieties studied since it has been numerously used or cited in the prior studies (Sweetser, 1996; Essegbey, 2005; Wu, 2011; Lestiono, 2012; Thiering, 2015).

In Talmy's (1985) topology, the term motion and location are used to further specify the scope of the spatial relationship. The former refers to any situation containing a particular

movement, whereas the latter refers to the maintenance of a stationary location. Those two situations, nonetheless, may be treated under a single heading of 'motion events'. The basic principle of a motion event, in this case, deals with the description of an object (Figure) as it moves or located with respect to another referential object (Ground). Aside from a *Figure* and *Ground*, the spatial description also has other elements, namely 'Path', 'Motion', 'Manner', and 'Cause'. The *Path* is defined as "the course followed or site occupied by the Figure object with respect to the Ground object" (p.61), which in some languages appears in the form of a preposition. The *Motion* refers to "the presence per se in the event of motion or location" (p.61). In addition, motion events can also have a *Manner* or a *Cause.* The application of those four semantic entities can be seen as follows:

	MANNER	**CAUSE**
MOTION	*Figure* *Manner-Verb* *Path* *Ground* The pencil rolled off the table (Talmy, 1985:61)	*Figure* *Cause-Verb* *Path* *Ground* The pencil blew off the table (Talmy, 1985:61)
LOCATION	*Figure* *Manner-Verb* *Path* *Ground* The pencil lay on the table (Talmy, 1985:61)	*Figure* *Cause-Verb* *Path* *Ground* The pencil stuck on (to) the table (after I glued it) (Talmy, 1985:61)

Table 1. Talmy's topology of language and space

Based on those examples, it can be inferred that a Figure is "a moving or conceptually movable object whose path is at issue" (Talmy, 1985: 61), and a Ground is "a referents-frame, or a referents-point stationary within a referents-frame, with respect to which the Figure's path is characterized" (p.61).

In regard to the use of Path in expressing a movement condition, Talmy (1985) mentions that different languages have different patterns of lexicalization of semantic elements. In this regard, Talmy differentiate languages into either verb-framed or satellite-frame. The former appears in Romance, Polynesian, and Semitic languages in which "the verb conflates motion with path" (p.75). In other words, in these languages the location or a movement is encoded in the main verb. The latter appears in Germanic, Slavic, Celtic, and Finno-Ugric languages in which "the motion is conflated with manner in the verb" (p.75). In other words, the location or movement is encoded in an independent element connected to the verb. This element is called as a satellite which may occur in a form of adpositions, particle, etc.

Talmy's typology, however, is not without challenges due to the existence of some languages which lexicalize both the manner and the path into serial verbs. In some literature, the

term Serial Verb Constructions (SVCs) is used to refer such occurrence (Foley & Olson, 1985; Lord, 1993; Zavala, 2006; Talmy, 2012). The SVCs are common in some languages, especially those of Southeast Asia, West Africa, Papua New Guinea, and East Asia (Foley & Olson, 1985). The SVCs are manifested in the use of multiple verbs, one of which is the head verb and the other is versatile verb (Matisoff, 1973). Talmy suggests that SVCs operate basically in a similar manner to satellite-framed languages in that the main verb acts like the manner verb and the versatile verb like the satellite. Slobin (2014), however, proposes a new typology to categorize such a construction as an equipollently-framed language. The basic conception is postulated out of the finding that the so-called versatile verb can actually stand independently. This second verb does not therefore act like a satellite which is always dependent to the main verb, but instead like a true verb which can occur by itself.

The comparative study on the expression of locative constructions in Surinamese and Java Javanese in the current research is carried out on the basis of Talmy's typology of spatial relationships, especially on the notion of motion and location. The comparison, in this case, is done by examining how both languages varieties make use of each semantic elements, i.e. Figure, Ground, Path, and Motion, in producing meaningful locative constructions. The outcome will then be used to investigate whether these varieties of Javanese exhibit different patterns.

2.2 Previous findings on language and space studies

In this section the findings on previous language and space studies will be presented: specifically, those discussing the notion of locative construction under the context of contact-induced change.

2.2.1 Consolidation

Yakpo et al. (2015) discover the occurrence of *consolidation* in the use of prepositional locative constructions in Sranantongo, that is to say that the aforementioned constructions have now acquired their complete development in the Heritage grammar so that they are now more firmly used than it was in the past. Prior investigations (Muysken, 1987; Bruyn, 1995; Van den Berg 2000) identify that Sranantongo has a long tradition for the rich usage of both prepositions and postpositions in expressing spatial expression, for example through the use of locative element *ondro* 'under(part)'. Yakpo et al., however, noted that postpositional constructions are totally absent in their research. It is assumed that the postpositional construction is no longer productive by a vast majority of contemporary Sranantongo speakers, and at the same time, they have undergone complete development towards the use of prepositional construction. The occurrence of consolidation, according to Yakpo et al., may root from an interference from the Dutch grammatical

system which only allows prepositional structures. This interference has led Sranantongo speakers to converge their grammar to Dutch in regard to the use of aforementioned structures. As a result, the contemporary Sranantongo has borne resemblance to its Dutch counterpart more than the one in the former variety of Sranantongo.

Besides the findings on the consolidation of the locative construction, Yakpo et al.'s study also points out the significance of some variables in language and space research on Heritage languages, i.e. proficiency, region, and age. The researchers have found out that those factors in some way influence the Heritage speakers' attitude toward their language. On this account, the capital is associated with higher proficiency and more frequent usage of dominant language. As for age, the older generation sometimes has a different preference than the younger generation in regard to particular aspect of the Heritage grammar.

The present research is interested in seeking the possibility of convergence in Surinamese Javanese towards two dominant languages, i.e. Sranantongo and Dutch. The attention is also drawn to examine whether age or the generation issue influences the way locative construction is expressed in Surinamese Javanese. The data are also collected from various regions in Suriname so that the conclusion will be more representative. The proficiency of the speakers, however, is not measured in this study for some reasons. First, it is quite hard to measure how fluent the participants are due to the absence of a standardized test for Javanese. Second, we try to rule out any meta-linguistic consciousness of the participants which may influence the result. Third, we attempt to avoid any linguistic insecurity of the Surinamese Javanese.

2.2.2 Reanalysis

In addition to consolidation, Yakpo et al. (2015) also discover that Sranantongo speakers have also performed a *reanalysis* in regard to the use of locative element *ini* 'in(side)'. By reanalysis, it means that the Heritage speakers analyze the function of particular grammatical aspects in a different manner from its original. This phenomenon is related to some issues in Heritage speakers' acquisition process such as incompleteness, attrition, and lack of input.

The reanalysis of *ini* is related to the use of general locative element *na* 'LOC', which is an optional locative marking in Sranantongo. It is discovered that the omission of *na* is varied across various adjoining locative elements. On this account, the omission is four times more frequent as *na* occurs with the locative element *ini* 'in(side)' than with other locative elements such as *tapu* 'upper(side)'. On the basis of this finding, it is assumed that *ini* has undergone reanalysis in that it has been modeled as a preposition, and loose its nominal characteristics. Yakpo et al. argue that the

reanalysis occurs as the consequence of language contact with Dutch. On this account, the locative element *ini* has become a preposition modeled along its cognate *in* in Dutch. The phonological similarity between Dutch and Sranantongo, in this case, is assumed to facilitate the contact-induced reanalysis of the locative element *ini.* The notion of reanalysis is also confirmed in other studies on Heritage languages (Dixon, 2008; Polinsky, 2008; Moro, 2016).

Considering the occurrence of reanalysis Yakpo et al.'s work, the current research concerns also look for any probability of this phenomenon in Surinamese Javanese, that is to say, whether any form of Javanese grammar is reinterpreted on the model of Dutch and Sranantongo as the dominant languages.

2.2.3 Overgeneralization and simplification

Ráhka (2013) locates the phenomenon of overgeneralization as well as simplification in regard to use of adpositions in locative constructions by Norwegian second language (L2) learners of Lule Sami; a minority language in Sweden and Norway. Those two languages differ in their expression of locative construction in that Lule Sami allows both locative cases and adpositions, whereas Norwegian only allows the adpositions. The result of a cloze test shows that the L2 speakers have a higher preference for adpositions over cases. The cross-linguistic influence from Norwegian is believed to be the most probable cause of such occurrence. The L2 speakers, in this case, have overgeneralized the function of adpositions in expressing locative expression. As for the minor L2 speakers using locative cases, the result shows that they do not always select the appropriate locative case markings. Ráhka thinks that this occurrence may be addressed to L2 speakers' attempt to simplify the use of case markings. Previous studies have also found out that overgeneralization and simplification are a common phenomenon in L2 grammar (Compagnon, 1984; Takashima, 1987; Silva-Corvalan, 1994; Gutierrez, 2003; Gass, 2008; Montrul, 2010; Al-Baldaw & Saidat, 2011).

2.3 Heritage Speakers and Heritage Language

2.3.1 Definition

One of the main questions to answer in this domain is how to define Heritage speakers. Two concepts of the term 'Heritage speakers' have been proposed, which are referred to as the broad and narrow definitions. The former emphasizes "possible links between cultural Heritage and linguistic Heritage" (Polinksy, 2007: 369). In this regard, the Heritage speakers are those who "have been raised with a strong cultural connection to a particular language through family

interaction" (van Deusen-Scholl, 2003: 222). Those speakers are characterized by their inability to speak the Heritage language, yet their 'Heritage motivation' has encouraged them to join language classes to re-learn the language (Moro, 2016: 5). Under this condition, they are equivalent to second language learners in that their language begins somewhere in adulthood in the classroom (Polinsky, 2007:369). As for the narrow definition, the concept emphasizes on the "passive and active use of the Heritage language" (Moro, 2016: 5). Under this definition, Heritage speakers thus refers to those who are "raised in a home where the Heritage language is spoken and who are to some degree bilingual in the Heritage language and in the dominant language of the country" (Polinsky & Kagan, 2007, in Moro, 2016: 5). The present study will adopt the narrow definition of Heritage speakers and thus refers to individuals raised in homes where Surinamese Javanese is spoken and those who are to some degree bilingual in the Heritage language, i.e. Surinamese Javanese, and the dominant languages, i.e. Dutch and/or Sranantongo.

2.3.2 Characteristics

The most notable characteristic of the Heritage speakers is that they acquire the Heritage language first in the order of acquisition, yet the acquisition process is not complete since the speakers soon switch to the dominant language (Polinsky, 2007: 369-370). Moro (2016: 6) mentioned that in the case of adolescence and young adult they become more fluent in the dominant language and as a result their Heritage language might undergo attrition, incomplete acquisition, and transfer from the dominant language. These impacts lead to tremendous variation in the levels of proficiency in Heritage language. This variation has also brought up another consequence in that the Heritage language variety diverges from the baseline language (Montrul & Bowles, 2009; Laleko, 2010; Montrul, 2011; Valk, 2015; Moro, 2016).

2.3.3 Baseline Language

Another significant question to raise in Heritage language studies is how to select an appropriate baseline language so that a justifiable comparison can be conducted. The majority of studies carry out comparisons between adult bilingual Heritage speakers to *adult (monolingual) Homeland speakers* (Polinsky, 2008; Montrul, 2009; Montrul & Bowles, 2009; Valk, 2015; Moro, 2016). Those researchers argued that such comparison could rule out possible outcomes of contact from the dominant language on the Heritage language (Moro, 2016: 7).

Other studies selected *L2 learners* to be the baseline group (Au et al., 2002; Montrul, 2011). The argument behind this viewpoint is that both Heritage speakers and L2 learners share the same

set of languages, i.e. the dominant language/L1, and the Heritage language/L2 (Moro, 2006: 8). This idea, however, is not without opposition in that both groups differ in their age of acquisition (Moro, 2006: 8). In this regard, some studies have proven that earlier acquisition gives individuals an advantage in the areas of syntax and phonology (Au et al., 2002; Montrul 2012).

Some researchers tried to compare the Heritage speakers with the *Homeland (monolingual) children* since both groups share the identical path of acquisition up to the earlier age (O'Grady, Lee, & Lee, 2011; Polinsky, 2011). After that age, however, Heritage speakers gain less and less input to the language (Moro, 2016: 9) leading to an incomplete acquisition (Silva-Corvalán, 1994; Montrul, 2009).

The present study selects the first proposal in that the adult Heritage speakers of Javanese in Surinamese are compared to adult Homeland speakers of Javanese in Java.

2.4 Contact-induced change

Yakpo et al. (2015: 165) mention that language change may occur as a consequence of language-internal processes or contact-induced. In the case of contact-induced language change, both external (social) and internal (linguistic) factors play significant roles in the emergence of this change (Valk, 2013: 159). The external factor covers some notions such as the intensity of contact, language attitudes, and language prestige which is related to quantitative dimension, i.e. the degree of cross-linguistic influence that may occur (Doğruöz & Backus, 2007: 186). The internal factor, on the other hand, pertains to the qualitative dimension, that is to say what kind of changes might occur. This factor is closely related with notions such as the intensity of use of the two languages, the frequency of use of specific forms, and typological distance (Doğruöz & Backus, 2007: 186).

At the general level, contact-induced language change leads to two major outcomes, namely language maintenance and language shift. In the maintenance schema the speakers preserve their native language throughout several generations, while in the shift schema the speakers cease to pass on the Heritage language and start adopting the language with which they are in contact (Thomason & Kaufman, 1998: 88; Winford 2003: 2). At the specific level, contact-induced change leads to various linguistic outcomes, which can be referred to both synchronically and diachronically. The former includes phenomena such as code-switching, lexical and structural borrowing, and loan-translation, whereas the latter involves lexical and structural change (Winford, 2003: 2). According to Weinreich (1968, in Croft, 2000: 145), the structural change works under an interference mechanism. In this case, the speakers initially identifies a specific element to be roughly similar in languages with which they are in contact. This ability is called interlingual identification by

Weinreich (1968, in Valk, 2005:3) referring to speakers' skill in matching the "system internal properties of two different languages based on their external features". Croft (2000: 146) called this ability "the setup of a cognitive link" triggering the transfer of linguistic properties between languages. This transfer then leads to contact-induced change (Valk, 2005:3). The present research is interested in examining the phenomenon of contact-induced change, especially on its diachronic outcome in the variety of Javanese spoken in Suriname.

2.4.1 Divergence and Convergence

The present research is trying to examine how the Heritage grammar diverges from the Homeland grammar, as well as converges to the grammar of the dominant language. In this regard, the terms divergence and convergence are used. Divergence denotes to an increase in the structural dissimilarity between the Heritage and Homeland variety, whereas convergence refers to simultaneous shift leading to a greater similarity between aforementioned two varieties (Moro, 2016: 11). Convergence, in this context, refers to a diachronic process leading to the emergence of new structures which "resemble both languages to some extent rather than one language completely" (Thomason, 2001 in Yakpo et al. 2015: 167). Winford (2003: 63) explains further about the occurrence of structural convergence in that it occurs as speakers of two languages somehow reduce or even eliminate any differences they find in their grammar either because one language adopts any structural feature from the other or because both languages compromise in any conflicting structures they have. Attention is drawn in the section to further discuss the factors yielding to divergence and convergence between Heritage grammar and Homeland grammar, i.e. cross-linguistic influence, incomplete acquisition, attrition, different types of inputs, and universal principles in language acquisition in contact setting.

2.4.1.1 Cross-linguistic Influence

Jarvis and Pavlenko (2008: 1) have defined cross-linguistic influence as "the influence of a person's knowledge of one language on that person's knowledge or use of another language". Moro (2006: 12) mentioned that this is synonymous with what is so called transfer. In this regard, two kinds of distinctions of transfer have been proposed by previous studies, which are lexical and structural transfer, depending on the type of linguistic elements being transferred (Thomason & Kaufman, 1988; Winford, 2003). The former refers to the transfer of phonological forms, whereas the latter involves "mapping of the grammatical or the semantic meaning while the form itself is not

borrowed" (Sakel, 2007: 15, in Moro 2016: 12). In the context of Heritage language research, the unequal status of the languages in contact in terms of prestige and functionality has been claimed to become a significant factor which fosters the transfer, hence from dominant to the Heritage language. The cross-linguistic influence may result in some manifestations, including a change in frequency, loss or reduction, and grammatical reanalysis.

2.4.1.1.1 Change in Frequency

Johanson (2002, in Moro 2006: 13) stated that once Heritage speakers start recognizing a sort of equivalence of a specific structure existing in both their Heritage and dominant language, they tend to choose the equivalent structure in their dominant language in such a frequent manner until it becomes the only option. In this regard, he referred to this type of change as "frequential copying". In frequential copying, the Heritage speakers copy particular units from the the grammar of dominant language in such a way that it undergoes a decrease or increase in terms of occurrence frequency. The change in frequency further brings out another consequence in that the aforementioned unit becomes less marked and at the same time gain more ground in Heritage grammar. In general, this type of change has resulted in the increase of structural similarity between languages in contact. This idea is supported by Enfield (2003: 356) through his 'self-perpetuating process' model in which he mentions that structural transfer has increased the compatibility of languages and thereby also increased the likelihood of structural borrowing.

2.4.1.1.2 Reduction or Loss

By reduction or loss, it means that certain linguistic features undergo a reduction in regard its frequency in the Heritage grammar or even get lost (Moro, 2016: 16). This phenomenon, according to other studies, shows the 'incompleteness' of Heritage grammars (Polinsky, 2006; Montrul, 2009; Benmamoun et.al, 2010). It is assumed that the reduction or loss is triggered by a little structural resemblance between the language(s) in contact setting (Montrul, 2010). On this account, the absence of a certain syntactic feature in the grammar of the dominant language will also be transferred to the grammar of the dominant language.

2.4.1.1.3 Grammatical reanalysis

In the case of a grammatical reanalysis, the Heritage speakers replicate either structures or categories in a language by using any material which is available in the Heritage language and then grammaticalize them into the structure which corresponds to them in the dominant language (Heine

& Kuteva, 2008:71). In the grammaticalization process, the Heritage speakers reinterpret the grammatical function of the replicated item by giving any additional attribute to it. Heine and Kuteva (2005, in Moro, 2016: 19) mention some symptoms which can be used in identifying the occurrence of grammatical reanalysis:

a. Extension, as indicated by the emergence of new grammatical meanings,

b. Desemanticization, as indicated by the loss or generalization in meaning,

c. Decategorialization, as indicated by the loss in "morpho-syntactic properties characteristic of lexical or other less grammaticalized forms",

d. Erosion, as indicated by "the loss in the phonetic substance",

e. Obligatorification, as indicated by "the increase in the frequency of a form".

2.4.1.2 Incomplete acquisition

Incomplete acquisition refers to the condition where Heritage grammar "fails to reach age-appropriate linguistic levels of proficiency as compared with the grammar of monolingual or fluent bilingual speakers of the same age, cognitive development, and social group" (Montrul & Bowles, 2009: 363). This phenomenon begins to take place in the moment when the Heritage speakers start socialization in the dominant language and at the same time get less input on their Heritage language. In this case, the use of the Heritage language is mostly limited to be only at the house. Under this disruptive condition, the Heritage language becomes the weaker language for the Heritage speakers in both structure and function (Benmamoun et al., 2010). In this case, the Heritage speakers somehow bear a resemblance to second language learners in regard to incomplete mastery as well as non-native-like proficiency of the second language. Incomplete acquisition mostly touches upon some elements in the Heritage language which need a long time to be acquired (Benmamoun et al., 2010). The interruption stage, therefore, makes it difficult for the Heritage speakers to fully attain those elements. Previous studies have found out the occurrence of incomplete acquisition on some grammatical elements, such as the subjunctive (Blake, 1983; Martínez-Mira, 2009; Potowski et al., 2009) and gender assignment (Comrie et al., 2003; Polinsky, 2008).

2.4.1.3 Attrition

Different from incomplete acquisition which is rooted in insufficient input to develop the full proficiency of the first language (L1), attrition signals that the L1 has "a chance to develop completely and remained stable for a while before some grammatical aspects eroded later on" (Benmamoun et al., 2010: 10). In some cases, nonetheless, those two are sometimes problematic to differentiate because of the lack of acquisition data in regard to child control population (Polinsky, 2011). Attrition and incomplete acquisition, therefore, are sometimes conflated and treated as one (Montrul & Bowles, 2009). The attrition begins as the Heritage speakers use their language less and less due to some reasons, such as migration or repression. Previous studies have shown that some areas of grammar are prone to attrition, such as the comprehension of relative clauses (Guasti & Cardinaletti, 2003; Goodluck et al., 2006) and the use of genitive (Brehmer & Czachor, 2010).

2.4.1.4 Different types of Input

The Heritage speakers acquire a different type of input to the Homeland speakers, both qualitatively and quantitatively. Most of the Heritage speakers, in this case, rarely get any formal learning, such as by joining a language course. In fact, they acquire their Heritage language informally through communication and interactions with their family. This informal acquisition undoubtedly influences the type of output they get. On this account, it is likely that the linguistic features they select in their Heritage language are restricted to the colloquial than to formal register (Moro, 2016: 26). The example of how different types of input may result in divergence from the Heritage grammar can be seen in Moro's research about Heritage speakers of Ambon Malay in the Netherlands. She discovers an incongruence in regard to the choice of preposition for expressing *give*-constructions, such as in *John gives a flower to Mary,* between the 2nd and 3rd generation of Heritage speakers and the Homeland speakers. The incongruence, according to Moro, reflects the selection of prepositions by the first generation. In another word, the Heritage speakers show a strong preference towards particular prepositions in expressing the aforementioned constructions since it is "the most frequent form of the input they picked up from their parents" (Moro, 2016: 181).

2.4.1.5 Universal Principles

It is mentioned in the previous section that the divergence in the Heritage grammar may result from cross-linguistic influence from the dominant languages. It is, however, evident in some studies that the changes can also be triggered by the "universal regression process or simplification under reduced input conditions (as attested in the case of creole genesis)" (Benmamoun et al., 2011: 53).

In this regard, the Heritage grammar is restructured due to internal processes in the language itself, not from any external causes. Moro (2016) mentions about the phenomenon of simplification as one main principles of language development in the setting of language contact. The simplification may be identified on the basis of some symptoms such as preference on for particular structures, regularization, and reduction. In spite of the fact that universal principles work in the different system to cross-linguistic influence, Moro claims that "the two may reinforce each other in shaping Heritage language grammar".

2.5. Socio-historical and Linguistic Aspects of Suriname Javanese

2.5.1 Early phase

The Javanese were brought to Suriname at the end of the 19th century by the Dutch government as contract laborers. According to Derveld (1982, in Villerius, 2017), there were in total 33,000 Javanese laborers who were shipped to Suriname between 1890 and 1939. It is quite hard to exactly describe the linguistic properties of Javanese spoken by the first generation. However, it is likely that they spoke different dialects due to the fact they originated from various regions of Java.

Based on the calculation by Vruggink (2001, in Villerius, 2017), there were around 70% of the laborers coming from central Java, 20% from East Java, and 10% from West Java. This number was confirmed by Villerius' (2017) survey of the records of 15,709 laborers in immigration archives 1999 showing that 66% were from Central Java, 19% from East Java, 4% from West Java, 1% from either East or Central Java, and 10% unspecified. During this initial period, they came into contact with other workers originated from Africa, China, and India. Under these circumstances, the Javanese people probably started to speak Sranantongo which was the main language of communication among the aforementioned group (Villerius, 2017). There are, however, no exact data which record the fluency of this first generation of Javanese in speaking Sranantongo, although observations at a later point of time revealed that their fluency is not very high (Vruggink, 2001: xxvi in Villerius 2017).

For all children between age 7 and 12, they were obliged to attend classes in Dutch which is the official language of education. Van Lier (1977: 143, in Villerius, 2017) mentioned that during this period there is "a consistent aim at the merging of all races, including the Javanese, into a Dutch linguistic and cultural unity". In 1933, the condition however changed as the new governor Kielstra started promoting the recognition of authentic ethical identity confirmed by the establishment of 'desa schools' (desa means 'village' in Javanese) (Villerius, 2017). This system

which was organized in accordance to traditional Javanese culture unquestionably played an important role in the maintenance of Javanese in the early immigration stage (Villerius, 2017).

2.5.2 Language shift and attitude

Another record done between 1940 and 1950, however, revealed the occurrence of language shift in that the Surinamese Javanese started gaining better knowledge of Dutch (Villerius, 2017; Vruggink, 2001: xxvii in Villerius, 2017) and Sranantongo (Van Lier, 1977: 10, in Villerius, 2017). In regard to this phenomenon, some factors have been claimed to foster the occurrence of shift, namely education, urbanization, and participation in society and politics (Villerius, 2017). Some decades later, it was recorded that Javanese was losing its ground among the speakers as they start giving up their aforementioned language in favor of Dutch (Hagoort & Schotel, 1982 in Villerius, 2017).

This preference for Dutch has closely related to the stigmatization of Javanese which was associated with societal backwardness and Dutch which was regarded as language of intellectual and social progress (Villerius, 2017). It is also important to note that the Javanese they spoke was reduced in comparison to the one spoken in the Homeland in that they only used ngoko level (informal level).

At the present time, the Surinamese Javanese are said to have a good command in at least two languages, namely (Surinamese) Dutch and Sranantongo. In this regard, Dutch is seen as formal language which is mostly used at school or at work, whereas Sranantongo is seen as informal language which is used mostly to communicate with friends or in shops (Villerius, 2017). In addition, aforementioned languages are somehow associated with emotion; Sranantongo is regarded as powerful as it is manifested in the use of fixed expression, whereas Javanese is regarded as emotional as it is manifested in the use of Javanese in religious song (Villerius, 2017).

Based on the 2004 survey conducted by General Bureau of Statistics Census Office of Suriname, Javanese was listed as the fifth most spoken first language (behind Dutch, Sranantongo, Sarnami and Maroon languages) and as the fourth most spoken second language (behind Dutch, Sranantongo, and Sarnami). In terms of percentage, there were around 5.6% of all households which use Javanese as the first language and 5.5 % as the second language (Yakpo et al., 2015: 175). The last census in 2010 by *Nederlandse Taalunie* (the Dutch language standardizing agency) also presented similar outcome as Javanese came as the fifth most spoken language in Suriname (behind Dutch, Sranantongo, Sarnami, and English) (Yakpo et al., 2015: 176).

2.6 Locative constructions in languages under study

This section presents the description of all locative constructions of the languages analyzed in this study, namely Javanese (Homeland Javanese and Javanese in contact), Dutch, and Sranantongo.

2.6.1 Javanese

2.6.1.1 Homeland Javanese[1]

2.6.1.1.1 Position-type locative constructions

The speakers of Javanese construct a positional description by combining a figure with a prepositional phrase. On this account, Javanese does not have any copula '*to be'* or a locative/ existential verb '*be located'* to combine the aforementioned two elements. As for the prepositional phrase, it is introduced by a general locative marking *ing* 'LOC' with/without a specifier, such as (*n)dhuwur*[2] 'at the top', followed by a Ground. It is also possible to combine *ing* with an existential element *ana* 'there', resulting in another general locative marking *neng 'LOC'* (Setiyanto, 2010:201). The sentence examples can be seen as follows:

	Figure		***Path***	***Ground***	***Figure***	***Path***	***Ground***
(1)	*Bapak*	*macul*	*ing*	*sawah,*	*kakang*	*ing*	*kebon*
	Father	hoe	LOC	rice field,	brother	LOC	garden

'Father hoes in the rice field and brother in the garden' (Setiyanto, 2010: 201)

	Figure	***Path***	***Specifier***	***Ground***	***Figure***	***Path***	***Specifier***	***Ground***
(2)	*Buku-ne*	*ing*	*dhuwur*	*meja,*	*pen-e*	*ing*	*jero*	*tas*
	Book-DET	LOC	at the top	table,	pen-DET	LOC	inside	bag

'The book is on the table and the pen is inside the bag' (Setiyanto, 2010: 201)

	Path	***Ground***
(3)	*Neng*	*Karang-dhempel* *leledhang*
	LOC	Karang-dhempel to go (out) for a stroll

'To go out for a stroll in Karang-dhempel' (Setiyanto, 2010:201)

---

[1] The examples are all mainly in ngoko/informal register. An additional note will be displayed should example is given from another level.

[2] The speakers of Javanese in some cases pronounce the specifier with an additional interdental sound */n/* in the word-initial, such as in *dhuwur* 'at the top' into *ndhuwur, jero* 'inside' into *njero*, and *jobo* 'outside' into *njobo.* There is, however, no difference in meaning between those two.

The general locative marking *ing* is in some conditions optional. In this regard, the prepositional phrase can be introduced by a specifier (Setiyanto, 2010: 201), as in the following examples:

	Specifier	***Ground***		***Figure***	
(4)	*Dhuwur*	*meja*	*kae*	*sabak-e*	*sapa?*
	on	table	that	school slate-DET	whose?

'that school slate on the table, whose is it?' (Setiyanto, 2010: 201)

	Figure		***Specifier***	***Ground***	***Figure***		***Specifier***
(5)	*Ibu*	*ana*	*jero*	*dalem,*	*eyang*	*ana*	*jaba*
	Mother	there	inside	family section,	grandmother/father	there	outside

'Mother is in the family room but grandmother/father is outside' (Setiyanto, 2010: 202)

2.6.1.1.2 Movement-type locative constructions

In the motion description, the speakers of Javanese construct a structure consisting of a **figure**, a motion-verb, and a prepositional phrase. On this account, different types of locative elements are used in the prepositional phrase to express the goal or source of the movement of the figure. As for the former, the locative element *menyang '(to go) to/toward'* or general locative marking *neng* 'LOC' is used, whereas in the latter *seko* [ngoko/informal register] / s*aking*[krama inggil/formal register] 'from'. The examples can be seen as follows:

	Figure	***Path-of-motion-verb***	***Goal-expressing ground***	
(6)	*Ibu*	*tindak*	*menyang*	*pasar*
	Mother	go[krama inggil/formal register]	to	market

'Mother goes to the market' (Setiyanto, 2010: 202)

	Figure	***Path-of-motion-verb***	***Source-expressing ground***	
(7)	Bapak	kondur	saking	kantor
	Bapak	return home[krama inggil/formal register]	from	office

'Father goes back home from work' (Setiyanto, 2010: 202)

2.6.1.2 Javanese in Contact

Previous studies in regard to the development of the Javanese language in a contact setting have mainly focused on the use of motion expressions (Lestiono, 2012; Villerius, 2017). It is found out

that the Heritage speakers of Javanese in Suriname still mainly construct a motion expression by combining a motion-verb with a prepositional phrase, as in the following example:

	Figure		***Path-of-motion-verb***	***Goal-expressing ground***	
(8)	*cah*	*cilik-é*[3]	*mènèk*	*nèng*	*uwit*
	child	small-DEF	climb	LOC	tree

'The child climbs into the tree' (Lestiono, 2012: 19)

	Path-of-motion-verb	***Source-expressing ground***	
(9)	*tiba*	*sangka*[4]	*gunung*
	fall	from	mountain

'They fall from the mountain' (Lestiono, 2012: 20)

It is, however, important to note that those studies have also discovered that the Heritage speakers have developed a preference for expressing a motion expression through the use of multiple motion-verbs constructions. This type of construction is used by the Homeland speakers of Javanese, yet its frequency is not quite as high as it is in the Heritage variety. It is assumed that cross-linguistic influence from one of the contact languages, i.e. Sranantongo, where multiple verbs constructions are highly productive, has become the source of this change in frequency. The sentence examples can be seen as follows:

		Manner-of-motion-verbs	***Path-of-motion-verbs***
(10)	*asu-né*	*mlayu*	*lunga*
	dog-DEF	*run*	*go*

'The dog runs away' (Villerius, 2017)

			Path-of-motion-verbs	***Manner-of-motion-verbs***	
(11)	*saiki*	*tawon-é*	*mubal*	*ng-uyak*	*asu-né*
	Now	bee-DEF	get.out	TR-chase	dog-DEF

'Now the bees get out and then chase the dog' (Lestiono, 2012: 19)

---

[3] Note on the transcription system: a slightly different orthography is used in a purpose of distinguishing the two Javanese varieties. For the Surinamese Javanese, an orthography system recommended by Vruggink (2001: xli) is used. This system was also used in previous studies about the Surinamese Javanese (Lestiono, 2012; Villerius, 2017). This orthography is basically quite similar to that of the standard system, with the differences in the use of diacritics for vowels distinctions, i.e. /e/ (é) and /ɛ/ (è) as well as for the representation of /c/ as *ty*.

[4] *Sangka* 'from' is one of the variants of *seko* or *sangking*.

2.6.2 Dutch

Talmy (1991) classifies Dutch as a satellite-framing language for both movement and locative descriptions. On this account, the descriptions are basically carried out through the use of "verbs expressing the manner or cause of motion, or aspects of the figure or ground, but typically not the path" (Talmy, 1985 in Van Staden et al., 2016: 485) since the path is expressed in prepositional phrases. A further examination is carried out to see how this basic conceptualization is manifested in the construction of position and movement-type locative constructions in Dutch.

2.6.2.1 Position-type locative constructions

The static or positional description in Dutch is based on topological relations, as previously mentioned. The term *Basic Locative Constructions* (BLC), in this case, is used in previous studies to code any possible constructions originated from the relations between the figure and the ground (Essegbey, 2005; Grinevald, 2006; van Staden et al., 2016), including:

A. Figure is impaled by ground

	Figure		***Positional-verb***	***Path***	***Ground***	
(12)	*De*	*pijl*	*zit*	*door*	*de*	*appel*
	DET.DEF	arrow	sit.PRS	through	DET.DEF	apple

'The arrow is (pierced) through the apple' (van Staden et al., 2016: 486)

B. Figure is stuck to ground

	Figure		***Positional-verb***	***Path***	***Ground***	
(13)	*De*	*postzegel*	*zit*	*op*	*de*	*envelop*
	DET.DEF	stamp	sit.PRS	on	DET.DEF	envelope

'The stamp is on the envelope' (van Staden et al., 2016: 486)

C. Figure is 'damage' or negative space

	Figure		***Positional-verb***	***Path***	***Ground***	
(14)	*Het*	*gat*	*zit*	*in*	*mijn*	*linker-mouw*
	DET.DEF	hole	sit.PRS.3SG	in	POSS.1SG	left-sleeve

'The hole is in my left-sleeve' (van Staden et al., 2016: 486)

D. Figure is part of whole (part of ground)

	Figure		***Positional-verb***	***Path***	***Ground***	
(15)	*Het*	*blad*	*zit*	*aan*	*de*	*boom*
	DET.DEF	leaf	sit.PRS.3SG	on	DET.DEF	tree

'The leaf is on the tree' (van Staden et al., 2016: 486)

E. Figure is adornment or clothing

	Figure		***Positional-verb***	***Path***	***Ground***				
(16)	*De*	*ketting*	*zit*	*om*	*de*	*nek*	*van*	*de*	*vrouw*
	DET.DEF	necklace	sit.PRS.3SG	around	DET.DEF	neck	of	DET.DEF	woman

'The necklace sits around the neck of the woman' (van Staden et al., 2016: 486)

F. Figure is inanimate, movable entity in contiguity with ground

	Figure		***Positional-verb***	***Path***	***Ground***	
(17)	*Het*	*kopje*	*staat*	*op*	*de*	*tafel*
	DET.DEF	cup.DIM	stand.PRS.3SG	on	DET.DEF	table

'The cup is on the table' (van Staden et al., 2016: 486)

Unlike English, which makes use of copula in its description of spatial relations, the examples show that speakers of Dutch express such description by selecting a set of positional verbs, such as *staan* 'stand', *zitten* 'zit', *liggen 'lie',* or *hangen* 'hangen'. To choose the appropriate positional verb, the speakers must consider what the posture of the **figure** is like as well as its orientation toward the ground.

As for the preposition, Dutch does not have any default locative form such as the general locative marking or case ending. The selection of prepositions, in this regard, is determined by the nature of the spatial relation. In expressing a contact with an upper surface, for the example, the speakers of Dutch differentiate the use of Dutch preposition *op 'on$_1$'* and *aan* '*on$_2$*' depending on the exact position the figure. To give a special emphasis, the Dutch grammar allows the use of compound form comprising of an adverb and preposition, as in *bovenop* 'on top' [above+on], *onderop* 'at the bottom' [under+on], *middenin* 'in the middle' [middle+in]. The examples can be seen as follows:

	Figure		***Positional-verb***	***Path***	***Ground***	
(18)	*De*	*vlieg*	*zit*	*bovenop*	*de*	*antenne*
	DET.DEF	fly	sit.PRS.3SG	on top	DET.DEF	antenna

'The fly is sitting on top of the antenna' (van Staden et al., 2016: 488)

	Figure		***Positional-verb***	***Path***	***Ground***	
(19)	*Het*	*boek*	*ligt*	*onderop*	*de*	*stapel*
	DET.DEF	book	lie.PRS.3SG	at bottom	DET.DEF	stack

‘The book you are looking for is at the bottom of the stack’.

2.6.2.2 Motion-type locative constructions

The motion descriptions are constructed through the use of motion-verbs which code “aspects of the manner in which the motion takes place, the instrument with which the motion is performed, or the medium through which the motion takes place” (van Staden et al., 2016: 500). As for the path of movement, it is expressed by a satellite taking a form of a preposition or particle. The sentence examples can be seen as follows:

	Figure	***Path-of-motions verbs***	***Source-expressing Ground***		
(20)	*Hij*	*viel*	*van*	*het*	*dak*
	3SG.PRON	fall.PST.3SG	off	DET.DEF.SG.N	roof

‘He fell off the roof’ (van Staden et al., 2006: 481)

	Figure	***Path-of-motion-verbs***	***Path-expressing Ground***		
(21)	*Hij*	*valt*	*in*	*de*	*modder*
	3SG.PRON	fall.PRS.3SG	in	DET.DEF	mud

‘He falls to the mud’ (van Staden, Bowerman & Verhelst, 2006: 481)

	Figure	**Manner-of-motion-verbs**			**Source**			
(22)	*Het*	*hert*	*gooit*	*het*	*jongetje*	*van*	*een*	*klein*
	DET.DEF	deer	throw.PRS.3SG	DET.DEF	boy.DIM	off	DET.INDF	small

Goal			**Path**
afgrondje	*het*	*water*	*in*
cliff.DIM	DET.DEF	water	in

‘The deer throws the little boy from a small cliff into the water’ (van Staden et al., 2016: 500)

From the previous examples, it can be seen that the speakers of Dutch make use of both path-expressing and manner-expressing motion-verbs. Furthermore, it is also possible in Dutch grammar to put all elements of motion descriptions in a single clause, i.e. manner, source, goal, and path, as in (22). On this account, the motion descriptions are seen in Dutch as “a durative trajectory with a possible source, goal, and intermediate grounds” (van Staden et al., 2016: 500).

In addition, Dutch grammar also allows an inverted sentence when it is started by an adverb. In this regard, the motion-verbs are placed right after the adverbs and followed by the figure, path,

and the ground (23). It is also sometimes possible that the path is placed after the ground at the end of the sentence (24)

	Manner-of-motion-verbs	***Figure***	***Path***	***Ground***
(23) *en dan eh*	*springt*	*die kikker*	*uit*	*de fles*
and then PAUSE	jump.PRS.3SG	DET frog	from	DET bottle

'and then the frog jumps from the bottle' (DUTCH-MtAt-frogstory)

	Path-of-motion-verbs	***Ground***				***Path***
(24) *Dan*	*komt*	*daar*	*dus*	*een*	*uil*	*uit*
then	come.PRS.3SG	there	so	DET.INDEF.SG	owl	out

'So then an owl comes out of that' (van Staden, Bowerman & Verhelst, 2006: 481)

2.6.3 Sranantongo

2.6.3.1 Position-type locative constructions

In Sranantongo, the positional description is constructed mostly through the combination of a Figure, a locative/existential verb *de* 'be_located', and a locative phrase consisting of "a noun phrase (NP) expressing the Ground, and a spatial element expressing the Search Domain" (Essegbey, 2005: 239). As for the spatial element, the speakers of Sranan make use of an optional general locative preposition marking *na* 'LOC' (Yakpo et al., 2015: 184) and/or a locative preposition such as *tapu* 'upper', *ondro* 'under', or *ini* 'inside'. The locative preposition, in this case, may occur in pre-Ground (pre-nominal) and post-Ground (post-nominal) structure. Previous studies have found out, however, that the contemporary speakers of Sranantongo have a preference toward pre-nominal structure (Essegbey, 2005; Yakpo et al., 2015). The sentences examples can be seen as follows:

A. Figure is impaled by ground

	Figure	***Locative-verb***	***Ground [spatial element+NP]***		
(25) *den*	*pamper*	*de*	*na*	*a*	*tiki*
DET.DEF	paper	be_located	LOC	DET.DEF	stick

'The paper is on the stick' (Essegbey, 2005: 249)

B. Figure is stuck to ground

	Figure		*Ground [spatial element+NP]*		
(26)	*a*	*balón*	*tai*	*na*	*a*	*tiki*
	DET.DEF	ballon	tie	LOC	DET.DEF	stick

'The balloon is on the stick' (Essegbey, 2005: 248)

C. Figure is 'damage' or negative space

	Figure		*Locative-verb*	*Ground [spatial element+NP]*				
(27)	*a*	*olo*	*de*	*na*	*a*	*(ini)*	*duku*	*(ini)*
	DET.DET	hole	be_located	LOC	DET.DEF	(containing_region)	cloth	

'The hole is in the towel' (Essegbey, 2005: 247)

D. Figure is part of whole (part of ground)

	Figure		*Locative-verb*	*Ground [spatial element+NP]*		
(28)	*den*	*froktu*	*de*	*na*	*a*	*bon*
	DET.DEF	fruit	be_located	LOC	DEF	tree

'the fruits are on the tree' (Essegbey, 2005: 245)

E. Figure is adornment or clothing

	Figure		*Locative-verb*	*Ground [spatial element+NP]*		
(29)	*a*	*fingalinga*	*de*	*na*	*en*	*finger*
	DET.DEF	ring	be_located	LOC	POSS.3SG	finger

'The ring is on the (her) finger' (Essegbey, 2005: 244)

F. Figure is inanimate, movable entity in contiguity with ground

	Figure		*Locative-verb*	*Ground [spatial element+NP]*				
(30)	*a*	*kan*	*de*	*na*	*a*	*(tapu)*	*tafra*	*(tapu)*
	DET.DEF	cup	be_located	LOC	DET.DEF	(upper_surface)	table	

'The cup is on the table' (Essegbey, 2005: 239)

2.6.3.2 Movement-type locative constructions

In expressing movement description, the speakers of Sranantongo make use of a construction composed of motion-verbs and prepositional phrases. As in the positional description, the prepositional phrases are introduced by general locative prepositions *na* or *a* "LOC" followed by an NP expressing the Ground. The sentence examples can be seen as follows:

	Figure	*Path-of-motion-verbs*	*Goal-expressing Ground*			
(31)	*Mi*	*e*	*go*	*na*	*mi*	*mama*	*oso*

1SG IPFV go LOC ISG mother house

'I'm going to my mother's house' (Wilner, 1992: 47)

Figure ***Path-of-motion-verbs*** ***Source-expressing Ground***

(32) *Kofi hari a pikin komoto na ini a olo*

3SG pull.PST DET child come.out LOC in DET hole

'Koffi pulled the child out of the hole' (Wilner, 1992: 29)

Furthermore, previous studies have also discovered the frequent use of constructions composed of multiple motion-verbs in describing a movement event (Wilner, 1994; Lestiono, 2012; Winford & Plag, 2013; Villerius, 2017). The multiple motion-verbs may occur in two manner-of-motion-verbs, two path-of-motion-verbs, or a combination of those two verbs. The examples can be seen as follows:

Manner-of-motion-verbs ***Manner-of-motion-verbs***

(33) *Yu dyompo tanapu lek wan busbrompki*

2SG jump stand like one bush flower

'You spring up like a wildflower (Sebba, 1987: 42)

(34) Yu tere dati Turku e suku yu, a betre yu

2SG hear that Turks IPFV look.for you, be better you

Path-of-motion-verbs ***Path-of-motion-verbs***

wijk uit komoto na Holland

emigrate come.out of Holland

'You hear that the Turks are looking for you, you better get out of Holland' (Wilner, 1992)

Path-of-motion-verbs ***Path-of-motion-verbs***

(35) a boi fadon go na gron

DEF boy fall go LOC ground

'the boy falls to the ground' (Sranan-WeRo-frogstory)!

Manner-of-motion-verbs ***Path-of-motion-verbs***

(36) *a dagu lon gwe*

DET.DEF frog run go.away

'The dog runs away' (Villerius, 2017)

CHAPTER 3. RESEARCH METHOD

3.1 Research Approach

Two approaches are utilized in the current research, qualitative and quantitative. The former cope with how locative constructions are described in both Surinamese and Java Javanese, while the latter deals with the record of frequency of the locative constructions expressed in both aforementioned Javanese varieties. Both approaches are then combined with the purpose of conducting a comparative analysis between Surinamese and Java Javanese in their usage of locative constructions.

3.2 Data Sources

The current study makes use of an existing set of videos obtained from oral elicitations. Those videos are assembled by researchers affiliated to the Traces of Contact project (ERC Project #230310).[5]

As for the elicitation material, a picture story book by Mayer (1969) entitled 'Frog, Where Are You?' is used. The previous studies have shown that this storybook is quite handy for eliciting the participants' usage of serial verb constructions (SVCs) and motion descriptions (Slobin, 1996; Lestiono, 2012; Villerius, 2017). Slobin (1996, in Lestiono, 2012: 14) further explains that the practicality of the storybook is rooted in its "rich array of motion descriptions". In this regard, it depicts a boy and his dog who are looking for the missing frog. Throughout the quest, they experience various motion-related events including being chased by a swarm of bees, climbing up a tree and a hill, falling from a tree, being thrown off to the ravine, and so on.

Four scenes from the Frog story are selected in the present study, including the scene where the frog goes out of a jar (Figure 1), the boy and the frog look for the missing frog (Figure 2), the owl comes out of the hole and the boy falls from the tree (Figure 3) and the boy and the dog are thrown off the ravine (Figure 4). The Figure 1, 3, and 4 are selected due to the rich production of movement-type locative constructions, whereas the Figure 2 is due to the rich production of position-type locative constructions.

[5] The ERC-project Traces of Contact (2009-2013) aims to establish criteria by which results from language contact studies can be used to strengthen the field of historical linguistics, online URL http://www.ru.nl/linc/projects/erc-traces-contact/ [Last accessed 17 Juli 2017]

Figure 1. The frog goes out of a jar

Figure 2. The boy and the frog look for the missing frog

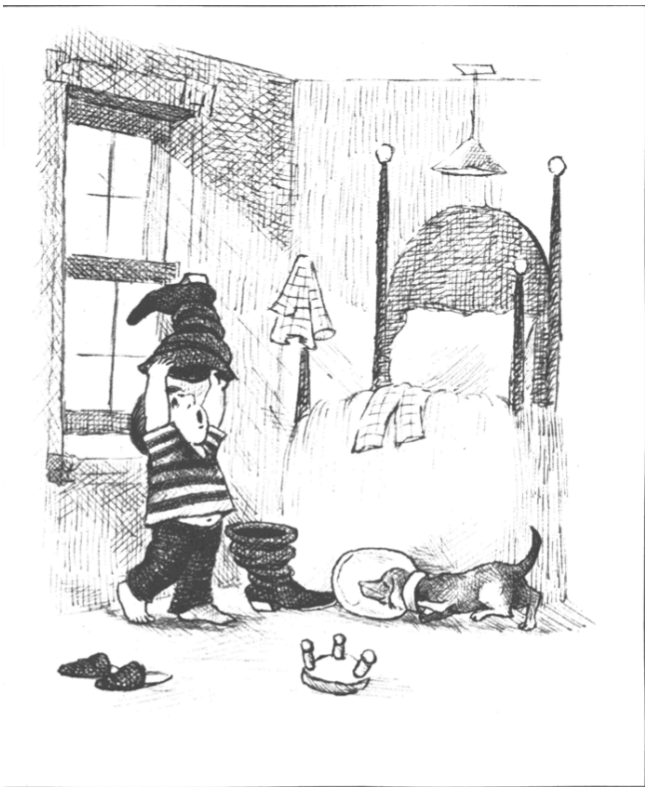

Figure 3. The owl comes out of the hole and the boy falls from the tree

Figure 4. the boy and the dog are thrown off the ravine

!

!

3.3 Data Collection

3.3.1 Participants

A total of 30 recordings are used in this research; 20 of which include the speakers of Surinamese Javanese and the 10 others include speakers of Java Javanese.

3.3.1.1 Surinamese Javanese speakers

The sample of Surinamese Javanese speaker consists of 12 females and 8 males, with an age ranging from 25 years to 83 years old (M = 57.90, SD = 16.4). The majority of the sample belongs to either the third or fourth generation, implying that they were all born in Suriname. Other participants belong to the second generation, suggesting that they are all the children of the first generation of Javanese immigrants in the Suriname.

All of those speakers acquired their Javanese in a naturalistic setting, typically directly at home from their parents. Most of the participants identify themselves as having either Javanese or Dutch as their mother-tongue. Most of them also mention that Dutch is their dominant language. They do, however, still use their Javanese for mostly communicating with their parents, grandparents, and spouse. Besides Javanese and Dutch, they also report their active usage of Sranantongo which they mostly use to communicate at the street, shops, or with peers. Besides those three aforementioned languages, some speakers also claimed to have knowledge of some foreign languages, including English, Spanish, Portuguese, and Mandarin.

As for the place of residence, the speakers come from five different regions in Suriname, namely Tamanredjo, Paramaribo, Domburg, Para, and Lelydorp. The breakdown of the demographic information of this group is listed in the table below:

Sample	Code	Sex	Age	Generation	Origin	Language Background		
						Mother-tongue	Dominant	Other
H1	FlWa	F	47	3	Paramaribo	Javanese	Javanese	Sranantongo, Dutch, English
H2	RiKa	F	64	2/3	Paramaribo	Javanese	Javanese	Sranantongo, Dutch
H3	PaRa	F	76	2	Domburg	Javanese	Javanese	Dutch, Sranantongo
H4	SaRa	F	66	2	Domburg	Javanese	Javanese	Dutch, Sranantongo
H5	JuSa	F	28	4	Para	Dutch	Dutch	Javanese, Sranantongo, English
H6	ChAr	F	25	4	Para	Dutch	Dutch, Javanese	Sranantongo, English

H7	MeWo	F	32	4	Para	Dutch	Dutch	Javanese, Sranantongo, English
H8	NaSa	F	25	3/4	Para	Dutch	Dutch	Javanese, Sranantongo, English
H9	TeHe	F	36	4	Para	Dutch	Dutch, Sranantongo	Javanese, Sranantongo, English, Indian, Spanish
H10	MtAt	F	63	3	Lelydorp	Javanese	Javanese	Sranantongo, Dutch
H11	MdAt	F	61	3	Lelydorp	Javanese	Javanese	Sranantongo, Dutch
H12	SaPa	F	65	3	Lelydorp	Javanese	Javanese, Dutch	-
H13	JaDj	M	83	2	Tamanredjo	Javanese	Javanese	Sranantongo, Dutch
H14	SoIr	M	68	3	Paramaribo	Javanese	Dutch	Sranantongo
H15	WaKa	M	69	3	Paramaribo	Javanese	Dutch, Sranantongo, Javanese	-
H16	EdMo	M	62	3	Paramaribo	Javanese	Dutch	Sranantongo, English
H17	SoRo	M	52		Paramaribo			
H18	MaAm	M	38	3-4	Paramaribo	Dutch	Dutch	Sranantongo, Indonesian, Spanish, Portuguese, Mandarin
H19	DaMa	M	39	3	Paramaribo	Dutch	Dutch	Javanese, Sranantongo, English, Spanish
H20	PoDj	M	61	2-3	Paramaribo	Javanese, Dutch	Dutch	Sranantongo, English

Table 2: Demographic information of Surinamese Javanese speakers[6]

H : Heritage, F : Female, M : Male

3.3.1.2 Java Javanese speakers

The sample of Java Javanese speakers included five females and five males, with an age ranging from 17 years to 78 years old (M= 48.0, SD= 21.8). Almost all speakers have identified Javanese as their mother-tongue, expect for one participant selecting Indonesian as her mother-tongue. The data for this group are collected in two provinces in Java Island, namely the special region of Yogyakarta

[6] The demographic information is not yet complete, especially in regard to generation and language history. The analysis, however, will not really use that information as important variables. Therefore, it will not really influence the result.

(six participants) and East Java (four participants). The selection of these two provinces is based on previous findings showing that Javanese Heritage speakers in Suriname are mostly originated from those two provinces (Villerius, 2017). It is hoped, therefore, that the comparison of the occurrence of the locative construction in two varieties is more justifiable due to the match between the geographical origin of Homeland speakers to the origin of Heritage speakers in the past. As for the number of the participants, more participants originated from Yogyakarta to represent the geographical distribution of immigrants; 60% of which are originated from Central Java/Yogyakarta (Villerius, 2016).

All of them acquire their Javanese in a naturalistic setting and master both the informal '*ngoko*' and formal '*krama*' register. They also mention their proficiency and active usage of Indonesian which they acquire either at home or at school. Besides those two aforementioned languages, some also report their knowledge of other languages, including Maduranese, English, Spanish, and Japanese. In terms of Dutch and Sranantongo, the participants mention that they have no knowledge of those languages. As for the Javanese spoken in Suriname, some mention that they have heard of it from the internet.

The breakdown of the demographic information of this group is listed in the table below:

Sample	Code	Sex	Age	Origin	Language Background	
					Mother-tongue	Other
B1	Anis	F	53	Yogyakarta	Javanese	Indonesian
B2	Rati	F	17	Yogyakarta	Javanese	Indonesian, English, Japanese
B3	MulT	F	77	Yogyakarta	Javanese	Indonesian
B4	Tati	F	54	Malang	Javanese	Indonesian
B5	Gita	F	29	Surabaya	Indonesian	Javanese, Indonesian, Spanish, Japanese
B6	Rudi	M	23	Yogyakarta	Javanese	Indonesian, English
B7	Supr	M	54	Yogyakarta	Javanese	Indonesian
B8	Nety	M	78	Yogyakarta	Javanese	Indonesian
B9	SuMu	M	62	Surabaya	Javanese	Indonesian, English
B10	Dani	M	26	Malang	Javanese	Indonesian, English, Maduranese

Table 3: Demographic information of Java Javanese speakers

B : Baseline, F : Female, M : Male

3.3.2 Elicitation Process

The elicitation sessions took place in familiar environments, typically at the house of the participants. The participants were assigned to perform a story-telling of the whole frog story. On this account, four scenes which contain a rich production of locative constructions will later be selected. As for the Surinamese Javanese participants, the instruction was given in Dutch. As for the Java Javanese participants, the instruction was given in English which was then translated into Indonesian or Javanese by translators. In both groups, the participants were asked to retell the story at an informal level 'ngoko' since previous literature has shown that Javanese spoken in Suriname has been reduced to this level (Villerius, 2017). The retelling session was self-paced by the participants. The participants' performances were then recorded. At the end of the elicitation session, the participants were asked to state some information via a questionnaire including their personal identity, language background, and research consent.

3.4 Data Analysis

All the recordings were further transcribed by means of software ELAN version 4.9.4. In this case, some of the recordings, especially the Surinamese group, had been transcribed by previous researchers, and then corrected if necessary by the author of this paper. Outside of those recordings, they were transcribed by the author of this paper, especially the Javanese group. The data were annotated phonemically rather than phonetically in an effort to facilitate word search. The data were first coded based on the token of the locative-item. Each of those locative-items was further coded for various type of features based on Talmy's typology (1985) including locative-figure, locative-path preposition, locative-ground, locative-path verb, locative-manner verb, and locative-type, i.e. position or movement. This sub-specification was created to better facilitate the comparison between two language varieties in terms of the use of locative construction.

The findings were then further transferred into SPSS version 23 to further facilitate quantitative analysis. Based on the outcome of this quantitative analysis, a comparative study was carried out to answer the first research question, i.e. how Surinamese Javanese and Java Javanese express the locative constructions. The metalinguistic data gathered from the questionnaire were also utilized to further see whether any notable differences in Surinamese Javanese speakers could be further addressed based on any factor, such as age. The next step was to further specify the role of language contact toward any existence of divergence and convergence in Surinamese Javanese.

The outcome of this step answered the second research question, i.e. if any differences take place, can it be explained on the account of language contact?

CHAPTER 4. FINDING AND DISCUSSION

4.1 Findings

4.1.1 Comparison on the basis of location type

This first section presents the findings of a comparative analysis between the two varieties of Javanese, i.e. Heritage speakers of Javanese in Suriname (Surinamese Javanese) and Homeland speakers of Javanese (Java Javanese), in expressing the locative construction. On the basis of Talmy's (1985) typology of motion events, some semantic elements are created in the present research to aid the comparison. Those elements can be seen as follows:

(a) **Path_Verb**, referring to any path-expressing motion-verbs, such as *tiba* 'fall'
(b) **Manner_Verb**, referring to any manner-expressing motion-verbs, such as *mlaku 'walk'*
(c) **Path_Prep**, referring to any prepositions encoding the path of the motion-verbs, such as *seko* 'from' as well as any prepositions encoding the position of the Figure in respect to the Ground, such as basic locative preposition in Javanese *nang* 'LOC'.
(d) **Specifier,** referring to any particle specifying the position of the figure as well as the path or manner of the motions verbs, such as (n)*dhuwur* 'top'

The comparison is first carried out in the syntactic level to investigate how those semantic elements are combined to produce a meaningful locative construction. In this regard, the current research is interested in looking at whether one variety of Javanese exhibits a different pattern from the other. In addition, a further comparison is also carried out at the lexical level. According to Benmamoun et al. (2010), Heritage speakers have somehow completely acquired the syntax of their Heritage language, yet they are still often weaker in their lexical knowledge in comparison to the Homeland speakers. On this account, the present research is also interested in investigating whether similar phenomenon occurs in the Heritage speakers of Javanese in Suriname. The lexical examination, in this case, focuses more on the use of *Path_Prep* since there are numerous options in Javanese grammar when it comes to the selection of the preposition to express locative construction. The researcher, therefore, is also curious whether a notable difference can be seen at the lexical level.

4.1.1.1 Movement-type Locative Constructions

The data of movement-type locative construction is mainly based on participants' description of Figure 1 (the frog goes out of a jar), Figure 3 (the owl comes out of the hole and the boy falls from

the tree), and Figure 4 (the boy and the dog are thrown off the ravine). These scenes are selected due to the rich production of movement-type locative construction.

4.1.1.1.1 Surinamese Javanese

The Surinamese Javanese produced 75 occurrences of movement-type locative construction, 22 of which belonged to Figure 1, 31 to Figure 3, and 22 to figure 4.

4.1.1.1.1.1 Syntactic Examination

4.1.1.1.1.1.1 Figure 1

Locative Construction	Token	Percentage (%)
Path_Verb	8	36.4
Path_Verb + Path_Prep + Ground	6	27.3
Manner_Verb + Path_Verb	3	13.6
Path_Verb + Path_Verb	1	4.6
Manner_Verb	1	4.6
Manner_Verb + Path_Prep + Ground	1	4.6
Path_Verb + Path_Prep + Specifier	1	4.6
Path_Verb + Path_Prep + Specifier + Ground	1	4.6
Total	22	

Table 4: Syntactic examination of Surinamese Javanese on Figure 1

In expressing a movement description such as how the frog goes out of the jar, the table shows that the Surinamese Javanese actively utilize both the manner-expressing motion-verbs 'Manner_Verb' and path-expressing motion-verbs 'Path_Verb' as the core unit of the locative constructions. Despite the variations, however, the data shows that the Surinamese Javanese have some major preferences, as seen in the following detail:

a. **Only Path_Verb**, which is the most frequent construction produced. In this case, the Surinamese Javanese mostly use the motion-verbs *lunga* meaning 'to go' and *metu* 'to go out' in Javanese. The sentence samples can be seen as follows:

			Path_Verb
(1)	*banjur*	*kodok-é*	***lunga***
	then	frog-DEF	go.away

'Then, the frog goes away'

				Path_Verb
(2)	*menaping*	*pas*	*kodok-é*	***metu***
	but	when	frog-DEF	go.out

'but when the frog goes out'

" !

b. **Path_Verb in combination with a Path_Prep and a Ground**, which is almost as frequent as the previous choice. The Surinamese Javanese, in this case, make use some Path_Preps, such as *sangka* and *teka* 'from' in Javanese. The sentence samples can be seen as follows:

		Path_Verb	***Path_Prep***	***Ground***
(3)	*kodok-é*	***lunga***	***sangka***	***gelas***
	frog-DEF	go.away	from	glass

'the frog goes away of the glass'

		Path_Verb	***Path_Prep***	***Ground***
(4)	*kodok-é*	***metu***	***teka***	***botol***
	frog-DEF	go.out	from	bottle

'the frog goes out of the bottle'

c. **Multiple Motion-Verbs Constructions**, which are constructed by combining the Manner_Verb with the Path_Verb as well as two Path_Verbs. The sentence samples can be seen as follows:

		Manner_Verb	***Path_Verb***
(5)	*kodhoké*	***mentyolot***	***lunga***
	frog-DEF	jump	go.away

'the frog jumps and goes away'

		Manner_Verb	***Path_Verb***
(6)	*kodhok-é*	***mlayu***	***lunga***
	frog-DEF	run	go.away

'the frog runs and goes away'

			Manner_Verb	***Path_Verb***
(7)	*kodok-é*	*arep*	***mbrobos***	***lunga***
	frog-DEF	will	breach	go.away

'the frog will breach and go away'

			Path_Verb	***Path_Verb***
(8)	*kodok-é*	*arep*	***metu***	***lunga***
	frog-DEF	will	go.out	go.away

'the frog will go out and go away'

4.1.1.1.1.1.2 Figure 3

Locative Construction	Token	Percentage (%)
Path_Verb	16	51.6
Path_Verb + Path_Prep + Ground	10	32.3
Path_Prep + Ground	2	6.5
Path_Verb + Specifier	1	3.2
Path_Verb + Path_Prep + Specifier	1	3.2
Path_Verb + Ground	1	3.2
Total	31	

Table 5: Syntactic examination of Surinamese Javanese on Figure 3

The table shows that the Surinamese Javanese have similar preferences of constructions in expressing another movement action, namely the owl goes out of the hole and the boy falls from the tree. As in the previous figure, the construction consisting of **only a Path_Verb** is the one most frequently used. The sentence samples with this construction can be seen as follows:

		Path_Verb			
(9)	*diindhik*	***metu,***	*ènèk*	*manuk*	*darès*
	slowly	go.out	there	bird	owl

'the owl slowly goes out'

					Path_Verb
(10)	*iki*	*botyah-é*	*wedi*	*terus*	***niba***
	this	boy-DEF	afraid	then	fall

'the boy is afraid and then fall'

			Path_Verb
(11)	*Tyah*	*lanang-é*	*gantèk*	***tiba***
	child	male-DEF	in turn	fall

'the boy falls in turn'

					Path_Verb
(12)	*Sak-iki*	*tyah*	*lanang-é*	*kagèt,*	***tiba.***
	now	child	male-DEF	shock,	fall

'now the boy gets shocked, then he falls'

Another construction which is also productive in describing this figure is **the combination of Path_Verb with a Path_Prep and a Ground**, as it is also found in the previous figure. The sentence samples with this construction can be seen as follows:

	Path_Verb	***Path_Prep***	***Ground***
(13)*dhéwéké*	***tiba***	***sangka***	***wit***
3SG.PRON	fall	from	tree

'He falls from the tree'

	Path_Verb	***Path_Prep***	***Ground***
(14)*doro*	***metu***	***sangka***	***bolongan***
pigeon	go.out	from	hole

'the pigeon goes out from the hole'

4.1.1.1.1.1.3 Figure 4

Locative Construction	Token	Percentage (%)
Path_Verb + Path_Prep + Ground	9	40.9
Path_Verb	7	31.8
Path_Verb + Path_Prep + Specifier	4	18.2
Path_Verb + Specifier	1	4.6
Path_Verb + Path_Prep + Specifier + Ground	1	4.6
Total	22	

Table 6: Syntactic examination of Surinamese Javanese on Figure 4

The table again shows the recurring pattern of preferences by Surinamese Javanese group in expressing a movement action. In describing how the boy and the dog are thrown off the ravine, the speakers make use of two prominent constructions as in the previous two figures, namely **the combination of Path_Verb with a Path_Prep and a Ground** as well as **only Path_Verb.** The sentence samples can be seen as follows:

	Path_Verb			***Path_Prep***	***Ground***
(15)	***tiba***	*karo*	*asu-né*	***nang***	**[water]**DUTCH

fall with dog-DEF LOC water

'fall with the dog to the water'

						Path_Verb	***Path_Prep***	***Ground***
(16)	*tyah-é*	*tyilik*	*karo*	*asu-né*	*kuwi*	***kejegur***	***nang***	***kali***
	child-DEF	small	and	dog-DEF	that	fall into	LOC	river

'the boy and the dog fall into the river'

		Path_Verb				***Path_Prep***	***Ground***
(17)	*kidang-é*	***njegurké***	*tyah-é*	*tyilik-é*	*kuwi*	***nang***	***kali***
	deer-DEF	throw	child-DEF	small-DEF	that	LOC	river

'the deer throws the boy to the river'

						Path_Verb
(18)	[*en*]DUTCH	*tyah*	*lanang-é*	*karo*	*asu-né*	***tiba***
	and	child	male-DEF	with	dog-DEF	fall

'and the boy with the dog fall'

		Path_Verb
(19)	*Sak-iki*	*tyah-é*	*di-tibakké*
	now	child-DEF	PASS-throw off

'now, the boy is thrown off'

4.1.1.1.1.2 Lexical Examination

Prepositional Phrase	Token	Percentage (%)
nang/nèng 'LOC'[7]	12	33.3
sangka 'from'	12	33.3

[7] Each locative preposition in English, such as *in*, *at*, and *on,* could be simply expressed by the use of basic locative preposition *nang* 'LOC' in Javanese (Robson & Wibisono, 2002). Besides *nang,* it is also possible to use 'nèng' which is a shortened variant of Javanese compound locative marker 'ana ing'. Both 'nèng' and 'ana ing' also cover the three aforementioned English locative prepositions, although it is claimed that 'nèng' is somehow more colloquial.

[8] In Javanese, the particle acts somehow as specifier as it gives an emphasis to the location of a particular object. In this case, it stresses the location of the object (static) or the source of departure (movement). Similar to other specifiers in Javanese, it is normally preceded by a locative preposition, such as *nang* 'LOC' and *seko 'from'*. The construction of preposition however cannot stand alone in that it must attach to either another specifier and/or a Ground. This factor brings a distinctive feature to the specifier in that it does behave like a specifier but it always appears in a combination with a preposition. For this reason, this kind of combination is seen as a single constituent and regarded as a prepositional phrase.

Prepositional Phrase	Token	Percentage (%)
teka 'from'	7	19.4
ana ing 'LOC'	2	5.6
ka 'from'	2	5.6
nang nggone 'LOC'[8]	1	2.8
Total	36	

Table 7: Lexical examination of Surinamese Javanese on Figure 1, 3 and 4

The examination of the use of **Path_Prep** in the construction of movement-type locative expression by the Surinamese Javanese shows the two most productive **Path_Preps**, namely *nang/nèng* 'LOC' and *sangka* 'from'. The sentence samples can be seen as follows:

			Path_Prep	
(20)	*terus*	*tiba*	***nèng***	*ngisor*
	then	fall	LOC	bottom
	'then (the boy) fall'			

							Path_Prep	
(21)	*tyah-é*	tyilik	*karo*	*asun-é*	*kuwi*	*kejegur*	***nang***	*kali*
	child-DEF	small	and	dog-DEF	that	fall	LOC	river
	'the boy and the dog fall into the river'							

										Path_Prep		
(22)	*botyah*	*tyilik*	l*an*	*asun-é*	*tiba*	***sangka***	*eh*		*gunung*	*tjilik*	*iki*	
	child	small	and	dog-DEF	fall	from	EXCLAM		mountain	small	this	
	'the boy and the dog fall from the small mountain'											

Aside from looking at the use of **Path_Prep** in all scenes, another comparison is also carried out in examining how **Path_Prep** is used to express SOURCE-type and GOAL-type movement. In the former, the Ground is seen as a location from which a Figure moves, while in the latter the Ground is seen as a location toward which a Figure moves (Radford, 1997). In Javanese, the distinction is carried out mainly through the use of a different prepositional phrase. It is therefore interesting to investigate whether the Heritage speakers of Javanese in Surinamese still make use of the same preposition in expressing source or goal-type movement as the Homeland speakers of Javanese. The result of this sub-comparison can be seen as follows:

4.1.1.1.1.2.1 Source-type movement constructions

Prepositional Phrase	Token	Percentage (%)
sangka 'from'	12	57.1
teka 'from'	7	33.3
ka 'from'	2	9.5
Total	21	

Table 8: The use of lexicon in Source-type movement in Surinamese Javanese

The table shows that the Surinamese Javanese construct more than half of their source-type movement construction by the use of **Path_Prep** *sangka* 'from', as in the following sentence example:

	Path_Prep	
(23) *Mlumpat*	***sangka***	*botol*
jump	from	bottle
'jump out of the bottle'		

In addition, around third of the whole expressions are constructed with the Path_Prep *teka 'from'*, as in the following example:

	Path_Prep	
(24) *Tiba*	***teka***	*wit*
fall	from	tree
'fall from the tree'		

4.1.1.1.1.2.2 Goal-type movement constructions

Prepositional Phrase	Token	Percentage (%)
nang/nèng 'LOC'	12	80
ana ing 'LOC'	2	13.3
nang nggone 'LOC'	1	6.7
Total	15	

Table 9: The use of lexicon in Goal-type movement in Surinamese Javanese

As for the goal-type movement, the Surinamese Javanese group make use of preposition *nang* or *nèng* 'LOC' in almost all occurrences. The examples are as follow:

		Path_Prep	
(25) *terus*	*tiba*	***nèng***	*ngisor*

then fall LOC down

'then falls down'

Path_Prep

(26) *botyah* *tyilik-é* *tiba* ***nang*** ***nggoné*** *banyu*

child small-DEF fall LOC LOC water

'the boy falls to the water'

4.1.1.1.2 Java Javanese

The Java Javanese produce 35 occurrences of movement-type locative construction, 10 of which belong to Figure 1, 14 to Figure 3, and 11 to Figure 4.

4.1.1.1.2.1 Syntactic Examination

4.1.1.1.2.1.1 Figure 1

Locative Construction	Token	Percentage (%)
Path_Verb + Path_Prep + Ground	4	40
Manner_Verb	2	20
Manner_Verb + Path_Verb + Path_Prep + Ground	1	10
Path_Verb + Path_Prep + Specifier + Ground	1	10
Path_Verb + Specifier + Ground	1	10
Manner_Verb + Path_Prep + Specifier + Ground	1	10
Total	10	

Table 10: Syntactic examination of Java Javanese on Figure 1

As it can be seen from the table, the Java Javanese also productively make use of Path_Verb and Manner_Verb in expressing movement action. In this case, **the combination of Path_Verb with a Path_Prep and a Ground** occurs the most with sentence samples as follows:

Path_Verb ***Path_Prep*** ***Ground***

(27) *kodhok* ***metu*** ***soko*** ***toples***

frog go.out from bottle

'the frog goes out of the bottle'

Besides the previous construction, the Java Javanese also sometimes create a movement-type locative construction with **only a Manner_Verb**, as in this sentence:

Manner_Verb

(28) *kodhok-e* *wis* ***mlayu*** *ora* *ono*
frog-DEF already run no exist
'the frog is no more. It has already run'

In addition, the Java Javanese also produce locative constructions with the **multiple motion-verbs** although they are not frequently made as in the Surinamese Javanese. In this regard, the Java Javanese only produce one sentence as follows:

		Manner_Verb	***Path_Verb***			
(29) *kodhok-e*	*mlayu*	***mlayu***	***metu***	*seko*	*nggon*	*lodhong*
frog-DEF	run	run	go.out	from	LOC	jar

'the frog runs and goes out of the bottle'

4.1.1.1.2.1.2 Figure 3

Locative Construction	Token	Percentage (%)
Path_Verb + Path_Prep + Ground	5	35.7
Path_Verb	4	28.6
Path_Verb + Path_Prep + Specifier + Ground	4	28.6
Path_Verb + Path_Prep + Ground	1	7.1
Total	14	

Table 11: Syntactic examination of Java Javanese on Figure 3

A recurring pattern also occurs in this figure in that the **combination of Path_Verb with a Path_Prep and a Ground** makes the most construction. The sentence example can be seen as follows:

		Path_Verb	***Path_Prep***	***Ground***
(30) *bocah*	*cilik*	***ceblok***	***soko***	***wit***
child	small	fall	from	tree

'the boy falls from the tree'

The Java Javanese also sometimes modify the previous construction by adding a **Specifier** in between the Path_Prep and the Ground, as in the following sentence:

		Path_Verb	***Path_Prep***	***Specifier***		***Ground***			
(31) *ono manuk*	*guwek-e*	***metu***	***seko***	***njero***	***njero-n***	***leng***	***wite***	***kuwi***	***mau***
there bird	owl-DEF	go.out	from	inside	inside	hole	tree	that	previous

‘there is an owl going out from the inside of the hole of that tree’

Aside from the previous two constructions, the Java Javanese also frequently describe a movement description by the use of **only a Path_Verb**, as in the following sentence:

			Path_Verb				
(32) *terus*	*aku*	***tibo***	*jalaran*	*onok*	*manuk*	*seng*	*gedhe*
then	1SG.PRON	fall	because	there	bird	which	big

‘then I fall because of the big bird’

4.1.1.1.2.1.3 Figure 4

Locative Construction	Token	Percentage (%)
Path_Verb + Path_Prep + Ground	5	45.5
Path_Verb + Ground	3	18.2
Path_Verb + Path_Prep + Specifier + Ground	2	27.3
Path_Verb + Path_Verb + Ground	1	9.1
Total	11	

Table 12: Syntactic examination of Java Javanese on Figure 4

Further investigation in another figure results in a recurring pattern in that the **combination of Path_Verb with a Path_Prep and a Ground** is the most frequent construction, as in this sentence:

				Path_Verb	***Path_Prep***	***Ground***
(33) *Dani*	*ambek*	*kirik*	*iki*	***di-jegurno***	***ndek***	***kali***
3SG	and	dog	this	throw off-PASS	LOC	river

‘Dani and this dog are thrown off to the river’

It is also possible in Javanese to drop the **Path_Prep**, as it can be seen in this sentence:

		Path_Verb	***Ground***
(34) *Dani*	*akhire*	*njegur*	*kali*
3SG	finally	fall	river

‘finally, Dani falls in the river’

Another possible modification of the first construction is by adding an additional element, namely a **Specifier**, as in the following sentence:

		Path_Verb	***Path_Prep***	***Specifier***	***Ground***
(35)	*bocah*	*cilik*	*ceblok*	*saka*	*ndukur*[9]	*uwit*
	child	small	fall	from	top of	tree

'the boy falls from the top of the tree'

4.1.1.1.2.2 Lexical Examination[10]

Prepositional Phrase	Token	Percentage (%)
saka/seko 'from'	12	50.0
seko nggon 'from'	4	16.7
ana ing 'LOC'	3	12.5
nang nggone/nggene 'LOC'	2	8.3
nang/neng/ndek 'LOC'	2	8.3
ing 'LOC'	1	4.2
Total	24	

Table 13: Lexical examination of Java Javanese on Figure 1, 3, 4

An examination of the use of Path_Prep by Java Javanese group results in the high productivity of preposition *saka/seko/soko* 'from' which is used in half of the whole constructions. The other prepositions seem to be quite evenly distributed. The sentence examples can be seen as follows:

Path_Prep

(36) *kodhok-e* *kuwi* *metu* ***seka*** *toples*
frog-DEF that go out from bottle
'the frog goes out of the bottle'

Path_Prep

(37) *bocah* *cilik* *ceblok* ***saka*** *ndukur* *uwit*
child small fall from top tree
'the boy falls from the top of the tree'

Path_Prep

(38) *dadine* *bocah-e* *kuwi* *lugur* ***soko*** *tebing* *karo* *asu-ne*

[9] Ndukur is a variation of (n)dhuwur 'top of'

[10] A dialectical variant of the preposition 'nang' is used in the Javanese spoken in the East Java, namely 'ndek'. This variant is endowed with exactly the same semantical features with *nang* 'LOC".

so child-DEF that fall from cliff with dog-DEF

'so the child falls from the cliff with the dog'

Path_Prep

(39) *kodhok-e mlayu mlayu metu* ***seko nggon*** *lodhong*

frog-DEF run run go out from place bottle

'the frog runs and goes out from the bottle'

Path_Prep

(40) *banjur bocah cilik karo kirik-e mau kecegur* ***ana ing*** *jurang mau*

then child small and dog-DEF that fall LOC LOC ravine that

'then, the boy and the dog fall into the ravine'

As previously done with the Heritage speakers of Javanese in Suriname, an in-depth analysis is also further carried to see how the Homeland speakers of Javanese use prepositions in a source and goal-type movement condition.

4.1.1.1.2.2.1 Source-type movement constructions

Prepositional Phrase	Token	Percentage (%)
saka/seko 'from'	12	75
seko nggon 'from'	4	25
Total	16	

Table 14: The use of lexicon in Source-type movement in Java Javanese

The Homeland speakers of Javanese make use of the preposition *saka* and *seko* 'from' in almost all occurrences of source-type movement. The rest of the occurrences are expressed by the prepositional phrase *seko nggon* 'from'. The example can be seen as follows:

Path_Prep

(41) *bocah cilik ceblok* ***saka*** *ndukur uwit*

child small fall from top tree

'the boy falls from the top of the tree'

Path_Prep

(42) ono manuk guwek metu ***seko*** *uwit*

there bird owl come.out from tree

‘there is an owl coming out of the tree’

					Path_Prep		
(43)	*kodhoke*	*mlayu*	*mlayu*	*metu*	***seko***	*nggon*	*lodhong*
	frog-DEF	run	run	come.out	from	place	jar

‘the frog runs and comes out of the jar’

4.1.1.1.2.2.2 Goal-type movement constructions

Prepositional Phrase	Token	Percentage (%)
ana ing ‘LOC’	3	37.5
neng/ndek ‘LOC’	2	25
nang nggone/nggene ‘LOC’	2	25
ing ‘LOC'	1	12.5
Total	8	

Table 15: The use of lexicon in Goal-type movement in Surinamese Javanese

As for the goal-type movement action, the Homeland speakers of Javanese select a variety of Path_Prep which is quite equally distributed. The sentence examples can be seen as follows :

			Path_Prep			
(44)	*asu-ne*	*yo*	*tibo*	***ana***	***ing***	*jurang*
	dog-DEF	also	fall	LOC	LOC	cliff

‘the dog also falls in the cliff’

						Path_Prep	
(45)	*Dani*	*ambek*	*kirik*	*iki*	*dijegurno*	***ndek***	*kali*
	3SG	and	dog	this	throw-PASS	LOC	river

‘Dani and the dog are thrown off the river’

					Path_Prep	
(46)	*asu*	*mau*	*nyeblokke*	*sirah-e*	***neng***	*lodhong*
	dog	that	plunge	head.3SG.POSS	LOC	jar

‘the dog plunges his head into the jar’

					Path_Prep			
(47)	*terus*	*kodhok*	*iku*	*mencolot*	***nang***	***nggene***	*toples*	*seng*
	then	frog	that	jump	LOC	place	jar	iron

‘then the frog jumps into the iron jar’

		Path_Prep		
(48)	*nyemplung*	***nang***	*nggone*	*blumbang*
	plunge	LOC	place	river

‘plunge into the river’

4.1.1.2 Position-type Locative Constructions

The data of position-type locative construction is entirely based on participants’ description of Figure 2, namely the scene when the boy and the dog are looking for the frog. This scene is selected due to rich production of position-type locative construction.

4.1.1.2.1 Surinamese Javanese

26 occurrences are produced by the speakers of Surinamese Javanese in describing Figure 2.

4.1.1.2.1.1 Syntactic Examination

4.1.1.2.1.1.1 Figure 2

Locative Construction	Token	Percentage (%)
Path_Prep + Ground	15	57.7
Path_Prep + Specifier + Ground	7	26.9
Path_Prep	2	7.7
Specifier + Ground	1	3.8
Path_Prep + Specifer	1	3.8
Total	26	

Table 16: Syntactic examination of Surinamese Javanese on Figure 2

In Surinamese Javanese group, more than half of the positional descriptions are constructed through the combination of **a Path_Prep and a Ground**, as follows:

				Path_Prep	***Ground***
(49)	*aku*	*nggolèki*	*kowé*	***nèng***	***sepatu-ku***
	1SG.PRON	search	you	LOC	shoes.POSS.1SG

‘I search you in my shoes’

				Path_Prep	**Ground**
(50)	[*en*]DUTCH	*asu-né*	*delok*	***ning***	***botol***
	and	dog-DEF	see	LOC	bottle

‘and the dog sees in the bottle’

Furthermore, the Surinamese Javanese also sometimes insert a **Specifier** in between the Path_Prep and the Ground, as in the following sentences:

				Path_Prep	***Specifier***	***Ground***		
(51)	*Lha,*	*sak-iki*	*di-golèki*	***nang***	***njero-né***	***s-, apa***	***mau***	***buts***
	then	now	PASS-search	LOC	inside	what	previous	shoes

‘then now (it) was being search inside the shoes’

		Path_Prep	***Specifier***	***Ground***
(52)	*asu-né*	*nggolèki*	*nang*	*njero-né*	*botol.*
	dog-DEF	search	LOC	inside	bottle

‘the dog searches inside the bottle’

4.1.1.2.1.2 Lexical Examination

Preposition	Token	Percentage (%)
nang/nèng ‘LOC’	22	91.7
nang endi/nandi/neng ngendi/nongndi ‘where’	2	8.3
nang nggon ‘in, on, at’	1	4.2
Total	24	

Table 17: Lexical examination of Surinamese Javanese on Figure 2

In the lexical level, the Surinamese Javanese mainly express positional description through the use of Path_Prep *nang/nèng* in their construction, as in the following examples:

				Path_Prep	
(53)	*Tyah*	*lanang-é*	*nggolèki*	***nèng***	[*t-shirt*]DUTCH *-é.*
	child	male-DEF	search	LOC	t-shirt-DEF

‘the boy searches in the t-shirt’

				Path_Prep		
(54)	*Asu-né*	*mbarang*	*nggolèki*	***nang***	*lodhong-é*	*kuwi*
	dog-DEF	also	search	LOC	bottle-DEF	that

‘the dog also searches the bottle’

Aside from nang/nèng, some other prepositions are also used although they are not that numerous, such as in the following examples:

					Path_Prep	
(55)	*supaya*	*pingin*	*ndelok*	*kodhok-é*	***nèng***	***endi***
	in order to	want	see	frog-DEF	LOC	where

'in order to see where the frog is'

		Path_Prep				
(56)	*di-golèki*	***nang***	***nggon***	*laars-é*	*ora*	*ènèk*
	PASS-search	LOC	LOC	shoes-DEF	not	exist

' (they) search in the shoes but (the frog) is no more'

4.1.1.2.2 Java Javanese

As for the speakers of Java Javanese, the speakers produce 16 position-type locative constructions in describing Figure 2.

4.1.1.2.2.1 Syntactic Examination

4.1.1.2.2.1.1 Figure 2

Locative Construction	Token	Percentage (%)
Path_Prep + Specifier + Ground	7	43.6
Path_Prep + Ground	5	31.3
Path_Prep	3	18.8
Path_Prep + Specifer	1	6.3
Total	16	100

Table 18: Syntactic examination of Java Javanese on Figure 2

In line with the previous group, two constructions are also frequently used by the speakers of Java Javanese. As for this group, however, the construction composed of a **Path_Prep, Specifier, and Ground** is the one most frequently found, as in these examples:

			Path_Prep	***Specifier***	***Ground***	
(57)	*sirah-e*	*kirik*	*kui*	***ono***	***njero***	***toples***
	head-DEF	dog	that	LOC	inside	jar

'the dog's head is inside the jar'

		Path_Prep	***Specifier***	***Ground***	
(58)	*di-kiro*	*kodhok-e*	*neng*	*njero*	*sepatu*

PASS-assume frog-DEF LOC inside shoes

'it is assumed that the frog is inside the shoes'

The Java Javanese also seems to express constructions **without a Specifier**, as seen in the following sentence:

Path_Prep Ground

(59) *sampek* *nang* *tempat* ***nang*** ***panggen*** ***turune***

up to LOC place LOC place sleep

'up to the bed'

Aside from those two options, it is also likely that the construction may consist of **only Path_Prep,** such as:

Path_Prep

(60) *kodhok-e* *mau* ***neng*** ***ngendi***

frog-DEF that LOC where

'where is the frog?'

4.1.1.2.2.2 Lexical Examination

Preposition	Token	Percentage (%)
nang/neng/ndek 'LOC'	9	56.3
nangdhi/neng ngendi/nongdhi 'where'	3	18.8
ing 'LOC'	2	12.5
ono 'LOC'	1	6.3
nang nggon 'LOC'	1	6.3
Total	16	100

Table 19: Lexical examination of Java Javanese on Figure 2

An in-depth lexical examination demonstrates that the speakers of Java Javanese utilize the basic preposition *nang/ning/neng/ndek* 'LOC' in over half of the whole data. The sentence example can be seen as follows:

Path_Prep

(61) *asu-ne* *yo* *nggolek* ***nang*** *njero* *toples-e* *mau*

dog-DEF also search LOC inside jar-DEF previous

'the dog also searches inside that jar'

Some other prepositions are also found out in the data, although there is no striking difference in frequency among them. The sentence examples can be seen as follows:

Path_Prep

(62) ***nongndhi*** ***nongndhi*** *di-golek-i*
LOC LOC PASS-search
'being searched everywhere'

Path_Prep

(63) *lan* *kirik-e* *nggoleki* *o..* ***ing*** *njero* *toples*
and dog-DEF search PAUSE LOC inside jar
'and the dog searches inside the jar'

Path_Prep

(64) *sirah-e* *kirik* *kui* ***ono*** *njero* *toples*
head-DEF dog that LOC inside jar
'the dog's head is inside the jar'

Path_Prep

(65) *golekki* ***nang*** ***nggon*** *lodhong*
search LOC LOC jar
'search in the jar'

4.1.2 Between-Participants Comparison of Surinamese Javanese

This second section presents the findings of a between-participants comparison of each Heritage speaker of Javanese in Suriname in the way they express locative constructions. It is shown in the previous literature that age can be counted as a possible explanatory factor of the phenomenon of language shift in Heritage speakers (Montrul, 2012; Moro, 2016). In this regard, some sources of divergence and convergence are said to be particularly age-related, such as incomplete acquisition and attrition (Montrul & Bowles, 2009; Benmamoun et al., 2010; Montrul, 2010; Moro, 2016). The current research, therefore, is interested in exploring whether or not age differences cause a significant impact on the way Heritage speakers of Javanese in Suriname express the locative constructions.

It is expected that the findings will somehow closely relate to the ones from the previous section in that the most frequent used-constructions are maintained in each age-group. In addition, it is also

hypothesized that the old group might have more complete competence due to the age difference, in that they are able to come up with more variations of constructions in comparison to the young ones. In this case, it is most likely that a difference in age also brings difference in proficiency level.

In our data, the Surinamese Javanese make 18 different age groups, with an age ranging from 25 years to 83 tears old (M = 57.90, SD = 16.4). The analysis is carried out first at the syntactic level and then at the lexical level.

4.1.2.1 Syntactic Level

Construction/Age	25	28	32	36	38	39	47	52	61	62	63	64	65	66	68	69	76	83
MOST FREQUENT																		
Position																		
Path_Prep + Ground	v	v	v	v		v	v		v	v			v		v	v	v	v
Path_Prep + Specifier + Ground				v	v	v			v	v	v	v	v		v	v		v
Movement																		
Path_Verb + Path_Prep + Ground	v	v			v		v	v	v	v	v	v		v	v	v		
Path_Verb	v	v	v	v		v	v	v	v	v	v	v		v	v	v	v	v
Manner_Verb			v									v			v	v	v	
MULTIPLE VERBS																		
Movement																		
Manner_Verb + Path_Verb			v			v					v							
Path_Verb + Path_Verb														v				
OTHERS																		
Position																		
Path_Prep + Specifier													v	v			v	v
Specifier + Ground						v							v				v	
Ground + Specifier																		v
Path_Prep	v				v													
Movement																		
Path_Verb + Path_Prep + Specifier									v		v		v				v	v
Path_Verb + Specifier								v						v				

Construction/Age	25	28	32	36	38	39	47	52	61	62	63	64	65	66	68	69	76	83
Path_Verb + Path_Prep + Specifier + Ground				v										v				v
Manner_Verb + Path_Prep + Ground																v		
Path_Verb + Ground														v				

Table 21: Between-participants comparison of Surinamese Javanese on syntactic level

The table shows that some locative constructions are more consistently used in Surinamese Javanese than the others. In the case of positional description, almost each age group is familiar with the constructions composed of **a Path_Prep and a Ground with or without a Specifier.** As for the movement description, almost each age group is knowledgeable about the construction with **a single Path_Verb** as well as the combination of **a Path_Verb with a Path_Prep and a Ground.** In addition, both young and old groups also have knowledge of the constructions with multiple motion-verbs, although the tokens are not quite numerous in our data.

It is not surprising to see that the constructions mentioned above are the one we notice to be the most frequently used by the Surinamese Javanese in the previous section. These findings match our expectation that the preferable constructions are the ones consistently maintained across generations of the Surinamese Javanese. Furthermore, it can also be inferred from the table that older group do have more complete competence due to the age difference. As highlighted by the red nodes, the older generation is able to create various possibilities in expressing the locative expression. An exception occurs for the locative constructions made of a *Path_Prep* which are in fact only found in the younger group (25 and 38 year old speakers). Nonetheless, the use of this construction may be related to the fact that the younger generation sometimes try to find a strategy to gain time in retrieving any words or construction as they get lost in their elicitation[11]. In this case, this construction is quite simple and easy to retrieve. This idea may be substantiated by the fact that those younger speakers sometimes keep repeating the phrase over and over. The use of the particular construction therefore in this context can be accounted for the lack of proficiency in Javanese so that in our data it only appears in the younger group. The sentence samples can be seen as follows:

Path_Prep

[11] The constructions with only a *Path_Prep* are mostly interrogative sentences, asking where the frog is. The constructions are somehow simple and basic. It is mostly constructed with the item, such as *kodhok* 'frog' or subject pronoun such as k*owe* 'you' and a question word such as *nangdhi* 'where'.

(66) *supaya* *pingin* *ndelok* *kodhok-é* ***nèng*** ***endi***

that want see frog-DEF LOC where

'that (he) wants to see where the frog is'

Path_Prep

(67) *lho* [12] *kodhok* *kodhok* *kowé* ***nandi***

COMPL frog frog you where

'frog, where are you?'

4.1.2.2 Lexical Level

Path_Prep/Age	25	28	32	36	38	39	47	52	61	62	63	64	65	66	68	69	76	83
nang/nèng 'LOC'	v	v	v	v		v	v		v	v	v	v	v	v	v	v	v	v
sangka 'from'					v		v	v	v				v	v		v		
teka 'from'			v									v		v				v
nang nggon(e) 'LOC'				v							v							
ka 'from'										v								
ana ing 'LOC'															v	v		
neng endi/nandi/ neng ngendi/ nongndi 'where'	v				v													

Table 22: Between-participants comparison of Surinamese Javanese on lexical level

In the lexical level, the Path_Prep *nang* 'LOC' is consistently used across age group. This finding may explain why the occurrence of *nang* is really high in our previous section for both positional and movement description. Besides *nang*, the Path_Prep *sangka* 'from' is also quite frequently used across the age groups. The occurrence, however, is not as high as *nang* since this Path_Prep is only in movement description as it is seen in the previous section. Some other Path_Preps, such as *teka* 'from' and *nang nggone* 'LOC', do not occur quite often in our data, although both the young and old group seem to be knowledgeable of these prepositions. The Path_Prep *neng endi* 'where' and its

[12] *lho* is a particle used in an exclamation to express surprise

variants are only found in the young age group since its use is somehow related to lack of proficiency as previously discussed.

In general, the table shows that the older age groups present more variation in regard to the use of Path_Prep. It may be specifically addressed to the use of Path_Preps *ka* and *ana ing* which in our data are absent in the young age-group. It can be assumed therefore that the Surinamese Javanese in our data get benefit from age difference in both syntactic and lexical level.

4.2. Discussions

Previous studies have found out that contact-induced language change might result in two kinds of outcomes, namely language maintenance and language shift. By the former, it means that the Heritage speakers preserve their Heritage language throughout generations while by the latter it means that the Heritage speakers cease to pass on the Heritage language and start adopting the language with which they are in contact (Thomason & Kaufman, 1998:88; Winford 2003:2). This section will investigate which scheme is likely to happen in Javanese spoken in Suriname in regard to the use of locative expressions. The discussion, in this case, is carried out on the basis of findings of the comparative study presented in the previous section.

Should the Javanese spoken in Suriname does undergo language shift, further examination will be carried out to explain this phenomenon. In this regard, the previous literature uses the terms *divergence* and *convergence* in referring to this language shift phenomenon between the Heritage and Homeland variety (Thomason, 2001; Winford, 2003; Yakpo et al., 2015; Moro, 2016). This means that both varieties experiences an increase in the structural dissimilarity (divergence), while at the same time the Heritage variety experience a greater similarity to the dominant language (convergence) in contact situation (Moro, 2016:11). In this discussion, therefore, the possible source(s) of divergence and convergence will be investigated.

4.2.1 Discussion on movement-type locative constructions

4.2.1.1 Syntactic Level

In expressing movement, both varieties mainly use the construction composed of a Path_Verb, a Path_Prep, and a Ground. This construction is found in each selected figure, i.e. 1, 3, and 4, with occurrences ranging from 37-45%. Both varieties seem therefore to have the same preferences of construction in expressing movement-type locative expression. As a result, the Heritage speakers of Javanese in Suriname are likely to maintain this construction in their grammatical system. The outcome from an in-depth between-speakers examination also shows that almost all speakers in

each age group use this construction in conveying movement-type locative construction. The maintenance might be encouraged in this case by the structural similarity between Javanese and two languages in contact, namely Dutch and Sranantongo, in regard to the expression of movement-type locative constructions. In Dutch, both source (61) and goal-type (62) movement conditions are mostly expressed in the similar construction.

		Path_Verb	***Path_Prep***	***Ground***	
(68)	*Hij*	***viel***	***van***	***het***	***dak***
	3SG.PRON	fall.PST.3SG	off	DET.DEF.SG.N	roof

'He fell off the roof' (van Staden, Bowerman & Verhelst, 2006:481)

		Path_Verb	***Path_Prep***	***Ground***	
(69)	*Hij*	***valt***	***in***	***de***	***modder***
	3SG.PRON	fall.PRS.3SG	into	DET.DEF.SG	mud

'He falls into the mud' (van Staden, Bowerman & Verhelst, 2006:481)

The Sranantongo also uses the same construction as in Javanese to convey movement condition for both source (70 & 71) and goal-type movement (72), although in some cases the constructions are composed out of two motion-verbs:

	Figure				***Path_Verb***	***Path_Prep***	***Ground***	
(70)	*wan*	*owrukuku*	*fowru*	*a*	***komopo***	***uit***	***a***	***solo***
	one	owl	bird	DEF	come.out	from[DUTCH]	DEF	bottle

'an owl comes out from the bottle' (Sranan-WeRo-frogstory)

											Path_Verb	***Path_Prep***	***Ground***
(71)	*Yu*	*tere*	*dati*	*Turku*	*e*	*suku*	*yu, a*	*betre*	*yu*	*wijk uit*	***komoto***	***na***	***Holland***
	you	hear	that	Turks	IPFV	look.for	you, be	better	you	emigrate come.out		of	Holland

'You hear that the Turks are looking for you, you better get out of Holland' (Wilner, 1992)

		Path_Verb		***Path_Prep***	***Ground***			
(72)	*a*	***fadon***	*didon*	***na***	***gron***	*leki*	*busi*	*meti*
	3SG.PRON	fall.PST.3SG	lie.PST.3SG	LOC	ground	like	bush	animal

'He fell and lay on the ground like a wild animal.' (Sebba, 1987:45)

Since the constructions are available in the two languages in contact as it is presented in the examples, the Heritage speakers of Javanese in Suriname might not face any problem in continuing to use the construction as they speak Javanese.

In addition to the previous construction, the findings also demonstrate that both varieties also show an active use of single motion-verb in conveying the movement which can be either in the form of Path_Verb or Manner_Verb. The overall frequency, however, is somehow higher for the Surinamese Javanese ranging from 31-51%. An in-depth comparison between speakers examination on the basis of age difference shows that this simple expression is evenly distributed across all age groups, even somehow higher than the previous construction. Its simplicity might be the reason why its occurrence is quite high for the Heritage group. In addition, the two dominant languages also allow such type of description, as follows:

				Path_Verb
(73)	die	twee	zijn	***gevallen***
	DEM	two	PL.PFV	fall.PERF

'Those two fall' (Dutch-MtAt-frogstory)

						Path_Verb
(74)	a	jongen	nanga	a	dagu	***fadon***
	DEF	boy[DUTCH]	and	DEF	dog	***fall***

'boy and the dog fall' (Sranan-WeRo-frogstory)

Aside from those two frequently-used constructions, the findings show that the speakers of Surinamese Javanese produce more constructions composed of multiple motion-verbs than the Java Javanese. This construction is specifically found in Figure 1 when the speakers need to describe how the frog goes out of the jar. In the Surinamese group furthermore the spread of this construction is quite wide from the young to the old age group. This finding is in accordance with previous studies conducted to examine the use of motion-verbs by the Surinamese Javanese, especially in regard to the use of multiple motion-verbs constructions (Lestiono, 2012; Villerius, 2017). This phenomenon might be caused by the highly productive use of the aforementioned construction, as it can be seen in the following sentence examples:

			Manner_Verb	***Path_Verb***			
(75)	a	todo	***dyompo***	***gwe***	*uit*	*a*	*batra*
	DEF	frog	jump	go.away	from[DUTCH]	DEF	bottle

'the frog jumps and then goes away from the bottle' (Sranan-WeRo-frogstory)

Manner_Verb ***Path_Verb***

(76) *dan* *now* *a* *waswasi* ***frei*** ***go*** *na* *a* *boi*
then[DUTCH] then DEF owl fly go LOC DEF boy
'then now the owl flies and goes to the boy' (Sranan-WeRo-frogstory)

Path_Verb ***Path_Verb***

(77) *a* *boi* ***fadon*** ***go*** *na* *gron*
DEF boy fall go LOC ground
'the boy falls to the ground' (Sranan-WeRo-frogstory)!

Manner_Verb ***Path_Verb***

(78) ***Skoifi*** *a* *kasi* ***go*** *ini* *a* *Nuku*
push DET.DEF cabinet go in DET.DEF corner
'Push the cabinet into the corner' (Winford, 2013)

Manner_Verb ***Manner-Verb***

(79) *Yu* ***dyompo*** ***tanapu*** *lek* *wan* *busbrompki*
2SG jump stand like one bush flower
'You spring up like a wildflower (Sebba, 1987:42)

Manner_Verb ***Path_Verb***

(80) *Kofi* ***hari*** *a* *pikin* ***komoto*** *na* *ini* *a* *olo*
3SG **pull.PST** DET.DEF child **come.out.PST** LOC in DET.DEF hole
'Kofi pulled the child out of the hole' (Winford, 2013).

4.2.1.2 Lexical Level

In expressing source-type movement, both varieties predominantly use the same Path_Prep although in this case different variants are used, i.e. *saka* or *seko* 'from' for Java Javanese and *sangka, ka,* or *teko* 'from' for Surinamese Javanese. Next to the aforementioned Path_Prep, the Java Javanese group also use Path_Prep *seko nggon* 'from' in which its occurrence is absent in Surinamese Javanese. It is likely therefore to assume that *sangka* is actively passed on and successfully maintained across the generation.

As for the goal-type movement, both varieties show different usage of the Path_Prep. The Java Javanese make use of some prepositions with quite equal distribution, namely *ana ing* 'LOC'*, neng/ ndek* 'LOC'*, nang nggone/nggene* 'LOC'*, ing* 'LOC'. As for the Surinamese Javanese, they mainly

make use of Path_Prep *nang/nèng* ‘LOC’ in 80% of the whole occurrences. The Surinamese Javanese group may have therefore already developed such a preference in regard to goal-type movement. This high productivity may be encouraged by the existence of general path-expressing preposition *na* ‘LOC’ in Sranantongo grammar:

	Path_Verb		***Path_Prep***	***Ground***			
(81) *a*	***fadon***	*didon*	***na***	***gron***	*leki*	*busi*	*meti*
3SG.PRON	fall.PST.3SG	lie.PST.3SG	LOC	ground	like	bush	animal

‘He fell and lay on the ground like a wild animal.’ (Sebba, 1987:45)

As it can be seen in the sentence above, the Path_Prep *na* matches the preposition *nang* in Javanese in regard to their function as general locative marking. As locative marking, both *nang* and *na* take the same position in a locative constructions, namely between the motion-verbs and the ground. In addition, those two locative elements are also somehow like each other in regard to their phonology. On the basis of those similarities, it is reasonable to assume that the Heritage speakers of Javanese in Suriname have started to develop a conceptualization to perceive *nang* as a substitution of *na* due to cross-linguistic interference from Sranantongo. This reanalysis of *nang* may then result in the higher preference for selecting *nang* to express goal-type movement.

4.2.2 Discussion on position-type locative constructions

4.2.2.1 Syntactic Level

In expressing position-type locative construction, both varieties make use of the same locative construction, namely a Path_Prep and Ground with or without a Specifier. Both varieties, however, seem to be different in preference with regard to the use of those two constructions. In this case, the Surinamese Javanese prefer the one without a Specifier, whereas the Java Javanese prefer the one with a Specifier. The Surinamese Javanese, in this case, produce twice more constructions without a Specifier than those with a Specifier.

A further examination is carried out to investigate why the Surinamese Javanese show such a high usage of the aforementioned two constructions. In this regard, the grammars of two languages in contact, i.e. Dutch and Sranantongo are investigated in regard to how those two languages express position-type locative construction.

The Dutch language allows the same construction as in Javanese to express position-type locative construction in that the Path_Prep comes in adjacent to the ground:

(82) Hij speelt met ehm met z'n hond

3SG.PRON play.PRS.3SG with EXCLAM with 3SG.POSS dog

Path_Prep ***Ground***

in ***z'n*** ***kamer***

in POSS.3SG room

'He plays with the dog in his room' (Dutch-MtAt-frogstory)

(83) hij zocht overal waar de kikker kan zijn

3SG.PRON search.IPFV everywhere where DEF frog able.3SG.PRES INF

Path_Prep ***Ground*** ***Path_Prep*** ***Ground*** ***Path_Prep*** ***Ground***

in ***de*** ***laarzen***, ***in*** ***die*** ***fles***, overal ***in*** ***de*** ***kamer***

in DEF boot.PL, in DEF bottle, everywhere in DEF room

'He searched everywhere where the frog can be; in the boot, in the bottle, everywhere in the room' (Dutch-DeTo-frogstory)

Aside from this common construction, the Dutch language also has its own strategy in conveying a positional description. The concept is still similar in that the description is expressed on the basis of the topological relation between the Figure and the frame of reference (Ground). Nonetheless, the Dutch language makes use of a positional verb such as *staan* 'to stand' or *zitten* 'to sit' is utilized to convey such relation as well as give information on the posture of the figure (van Staden, Bowerman & Verhelst, 2006: 475). In these constructions, the structure of the description does not change in that the Path_Prep comes in adjacent to the ground. The example can be seen as follows:

Path_Prep ***Ground***

(84) *De* *lamp* *staat* ***op*** ***de*** ***tafel***

DET.DEF lamp stand.PRS.3SG on the table

'The lamp stands on the table' (van Staden, Bowerman & Verhelst, 2006:487).

Path_Prep ***Ground***

(85) *De* *postzegel* *zit* ***op*** ***de*** ***envelop***

DET.DEF stamp sit.PRS.3SG on the table

'the stamp is on the envelope' (van Staden, Bowerman & Verhelst, 2006:486).

Besides the previous construction, it is also possible in Dutch to convey a positional description by the use of compounds composed of adverbs and prepositions. This construction somehow looks

similar to the construction with a Specifier in Javanese. The sentence examples can be seen as follows:

				Path_Prep + Specifier		***Ground***	
(86)	*De*	*vlieg*	*zit*	***boven-op***		***de***	***antenne***
	DET.DEF	fly	sit.PRS.3SG	top of-on		DET.DEF	antenna

'The fly is sitting on top of the antenna' (van Staden, Bowerman & Verhelst, 2006:488).

			Path_Prep + Specifier	***Ground***	
(87)	*Het*	*staat*	***boven-in***	***de***	***kast.***
	DET.DEF.NET	stand.PRS.3SG	above-in	the closet	

'It is above in the closet (on the top shelf)' (van Staden, Bowerman & Verhelst, 2006:481).

As for Sranantongo, the positional description is also expressed with the construction composed of a Path_Prep and a Ground, as in the following sentence:

					Path_Prep	***Ground***	
(88)	a	dagu	e	luku	***in'***	***a***	***batra***
	DEF	dog	PRS	look.at	in	DEF	bottle

'the dog looks at in the bottle' (Sranan-WeRo-frogstory)

The basic positional description, however, is carried out by the use of locative verb *de* 'be located' to relate the figure and the locative element. In the matter of Path_Prep, the general locative preposition *na* 'LOC' is used as it is in the movement construction. The example can be seen as follows:

				Path_Prep	***Ground***	
(89)	*a*	*kopi*	*de*	***na***	***a***	***skotiriki***
	DEF.SG	cup	be_located	LOC	DEF	saucer

'the cup is on the saucer' (Essegbey, 2005:241)

				Path_Prep	***Ground***	
(90)	d*en*	*froktu*	*de*	***na***	***a***	***bon***
	DEF.PL	fruits	be-located	LOC	DEF	tree

'The fruits are on the tree' (Essegbey, 2005:246)

Besides the previous construction, it is also possible in Sranantongo to put any specifier in the locative construction. The position of the Specifier, in this case, can be either before or after the

ground. According to previous research by Yakpo et al. (2015), however, the post-positional structures are no longer in use by the vast majority of present speakers of Sranantongo. This claim is supported by the absence of this post-positional structure in their data. They further mention that in their research there is only one speaker of 90 years who states a preference for the post-positional structure, but admit that the aforementioned structure will be considered highly unusual by the speakers in younger ages. The example of this construction with a pre-positional path-expressing preposition can be seen as follows:

				Path_Prep	***Specifier***		***Ground***
(91)	a	buku	de	**na**	**ondro**	**a**	**tafra**
	DEF.SG	book	be_located	LOC	under	DEF.SG	table
	'The book is under the table'						

				Path_Prep	***Specifier***		***Ground***
(92)	*a*	*bedi*	*de*	***na***	***ini***	***a***	***kamra***
	DEF.SG	bed	be_located	LOC	in	DEF.SG	house
	'The bed is in the room' (Wilner, 1992:33)						

The overview above shows that both Dutch and Sranantongo match with Javanese in regard to the grammar of the positional description. In this case, both languages in contact allow and use the construction with path-expressing preposition and ground with or without a specifier. This factor may support the maintenance of the aforementioned two constructions for the Heritage speakers of Javanese in Suriname. In our data, therefore, we can find out such a high occurrence for the two construction.

It might also be important to note however that the Surinamese Javanese show such a high usage for the without-specifier construction despite the fact the both constructions are available in the languages under contact. This phenomenon may indicate that the Heritage speakers also have a preference toward the simple constructions. In this regard, the Heritage speakers attempt to select the simplest possible constructions in expressing their spatial description by avoiding the use of peripheral elements, such as specifiers. In addition, the less preference for specifier use may also be encouraged by the existence of general locative marking *nèng* or *nang* which is simple to use in creating a meaningful locative constructions.

It is possible that the Heritage speakers try to select the simplest possible constructions in expressing the locative expressions. In this regard, the Heritage speakers may avoid the use of peripheral elements, such as specifiers. This tendency is also encouraged by the existence of general locative marking *nèng* or *nang* which are not semantically specified. By the use of this locative marking, the Heritage speakers

In this case, it might be that the Surinamese Javanese also have a preference for a simple construction.

4.2.2.2 Lexical Level

In the lexical level, both varieties predominantly make use of the Path_Prep *nang* 'LOC' in expressing position-type locative construction. The frequency, however, is specifically higher for the Surinamese Javanese group. In our data, it is found out that the Surinamese Javanese use this preposition in around 91% of the occurrences. As for the Java Javanese, the frequency of *nang* usage is also high, yet they only use it for around 56% of the occurrences. The Java Javanese group, therefore, has more variation in regard to the use of Path_Prep. The Surinamese Javanese, in this case, might have a particular preference toward *nang* due to the presence of *na* in Sranantongo. As it has been discussed in the previous section, the aforementioned two prepositions are somehow similar in phonological, lexical, and syntactic level.

4.2.3 General Discussion

Six main results become apparent from the quantitative analysis of the data: (i) Some constructions are preferred more than the other in Surinamese Javanese and Java Javanese, i.e. *Path_Verb + Path_Prep + Ground* for the movement-type locative construction and *Path_Prep (+ Specifier) + Ground* for position-type locative construction; (ii) Constructions with multiple motion-verbs are more frequently used by the Surinamese Javanese; (iii) Simple constructions are more used by the Surinamese Javanese, i.e. *Path_Verb* for the movement-type locative construction and *Path_Prep + Ground* for the position-type locative construction; (iv) In expressing source movement-type locative construction, the Surinamese Javanese make use of different prepositions the ones used by the Java Javanese; (v) In both goal movement-type and position-type locative constructions, the path-expressing preposition *nang* is more frequently used by the Surinamese Javanese; (vi) In position-type locative constructions, the path-expressing preposition *nang* is also used significantly more in Surinamese Javanese. Those six findings are discussed here in turn.

It is likely that the constructions in point (i) are maintained in the Heritage speakers group because they also become a preferable construction in Homeland speakers. In addition, the previous section has also shown that those constructions are also able to be expressed in two languages in contact with the Javanese in Suriname, i.e. Dutch and Sranantongo. Moro (2016:174) mentions that "the best chance for a feature to maintain its status quo in a Heritage language is when there is a conspiracy between the Homeland language and the dominant language". This "conspiracy" in this context is related to how cross-linguistic experiences with the dominant languages may influence the way the Heritage speakers of Javanese in the Suriname conceptualize their grammar of Javanese. The preference of those constructions may, therefore, be seen as an overall inclination to use them in both the Heritage language and dominant languages.

Some constructions nonetheless are more dominant in the Heritage groups, that is to say, constructions with the multiple motions-verbs. As it is shown in the previous section, this phenomenon may be rooted in cross-linguistic influence from one of the contact languages, i.e. Sranantongo, which actively produces this construction. The Heritage speakers in this regard might try to copy particular units from the grammar of the contact language in such a way that it undergoes an increase in terms of occurrence frequency. Johanson (2002) used the term "frequential copying*"* in referring to this phenomenon. He further mentioned that this *frequential copying* starts once the Heritage speakers begin to recognize a sort of equable of specific structure in their Heritage and dominant language. We do find in our data that this construction is also possible in Javanese, although it occurs significantly more in the Heritage group.

In addition to multiple motion-verbs constructions, the Heritage group also shows more preference toward the use of simple constructions. On this account, the Heritage speakers attempt to simplify their spatial description by composing their sentences with only fundamental locative element, such as a motion, a path-expressing preposition and/or Ground. The Heritage speakers, therefore, try to avoid any peripheral locative elements, such as the specifier, as well as double combination of the same elements, such as multiple motion-verbs. It is proposed in this regard that the increase of preference might result from two mechanisms working together at the same time: (1) transfer from the contact languages, and/or (2) universal principles of language development.

The first simple construction, Path_Verb and Ground, is indeed common in both Dutch and Sranantongo in conveying positional description. This cross-linguistic factor may, therefore, encourage the active usage of the aforementioned construction. Nonetheless, it is not really evident whether the same mechanism results in the increasing usage of the second simple construction, Path_Verb. The motion-verbs are primarily a basic element for the making of movement-type

location so that it is likely that it can be found in any language. Therefore, aside from cross-linguistic interference from the dominant languages, there may be another mechanism responsible for the high frequency of construction composed of only a path-expressing verb: universal principles or regression process under reduced input conditions. The grammatical restructuring is in this condition "governed from within, by autonomous processes rooted in the internal structure of the language undergoing changes" (Laleko, 2010:33). Previous studies have discovered one principle of language development in reduced input conditions such as in the contact setting is a simplification (Benmamoun et al., 2011; Moro 2016). This simplification is said to be driven by human's natural preference in selecting "unmarked, less complex structure" over "marked ones or analytic construction" (Moro, 2016:27). It is possible that the universal principle has also influenced the development of Javanese in Suriname. The Heritage speakers of Javanese in Suriname, in this case, show preference on simplified construction due to minimum input.

To sum up, the increasing frequency of simple construction by the Surinamese Javanese may be the result of two intertwined mechanisms. The first is the 'indirect transfer' (Silva-Corvalán, 2008) from two contact languages, i.e. Dutch and Sranantongo, driven through cross-linguistic influence. Indirect transfer means that the influence does not involve any creation of new constructions, but it brings only a change in terms of frequency of the constructions which are already available in the Heritage language. The idea is somehow similar to Johanson's idea on *frequential copying* in that they both emphasize on a change of frequency of particular constructions in the Heritage grammar. The second is the universal principles of language contact which favor simple constructions. According to Polinsky and Kagan (2007), the aforementioned two mechanisms are likely to influence each other and therefore are not easy to separate one from the other.

In the lexical level, the Surinamese Javanese also maintain the use of particular Path_Prep, as in the case of *sangka/seko* 'from'. This maintenance of this preposition may result from the fact that the Homeland group also shows a preference toward the this preposition. From the perspective of cross-linguistic interference, the maintenance can be encouraged by the fact that in a sentence *sangka/seko* takes the same syntactic position as its counterparts in Dutch 'van' (as seen in example 68) and in Sranantongo 'na' (as seen in example 71).

It is however also important to note that both varieties use totally different variants of the aforementioned preposition. In this case, in our data, the Surinamese Javanese make use of *sangka, ka, or ka,* whereas the Java Javanese make use of *saka* or *seko.* This phenomenon corresponds to the findings by Moro (2016) in that the language spoken by the Heritage speakers differs in the choice of prepositions from the one spoken by Homeland speakers. This phenomenon is said to reflect the

choice of preposition of the first generation. It further implies that the divergence between the Heritage and Homeland variety may be better attributed to the influence of input passing through generations of Heritage speakers, than to some other factors such as cross-linguistic influence as well as incomplete acquisition. This idea is supported by the result of between-participants comparison conducted which shows that prepositions *sangka* and *teka* are used in both young and old generation of Surinamese Javanese. It may suggest therefore that these prepositions have been successfully passed on through generations of Heritage speakers of Javanese in Suriname.

In sum, the incongruence use of variants of preposition between the Heritage and Homeland variety is more likely to root in the type of input that the Heritage speakers received. A historical explanation nonetheless is needed to substantiate this claim in regard to the form of path-expressing prepositions used by the first generation of Surinamese Javanese.

A different phenomenon nevertheless occurs in goal movement-type locative construction as path-expressing preposition *nang* is used around three times more by the Surinamese Javanese than by the Java Javanese. In this regard, 80% of the constructions in the Heritage group are made through the use of this preposition. It has been discussed in the previous section that in Sranantongo goal movement-type locative construction is expressed through the use of general path-expressing preposition *na* which somehow similar to general path-expressing preposition *nang* in phonological, lexical, semantic, and syntactic level. The cross-linguistic interference may, therefore, be accounted for this phenomenon in that the Surinamese Javanese.

The increasing frequency of *nang* in the Surinamese group however does not only occur for movement-type locative construction, but also for the position-type locative construction. On this account, the frequency is somewhat higher in that 91% of the positional descriptions are made out of this preposition. It is, therefore, possible that the increasing frequency of *nang* does not solely result from cross-linguistic interference, but also *grammatical reanalysis* of preposition *nang*. It is mentioned by Heine and Kuteva (2015:80) that language contact might trigger grammatical reanalysis or contact-induced grammaticalization. This grammaticalization due to language contact can be identified on basis of several symptoms, one of which is *obligatorification* or increase in the frequency of a form. It may be possible that the cross-linguistic interference from Sranantongo has encouraged the Heritage speakers to overgeneralize the use of *nang* in any locative construction they find it possible to insert *nang*. The Surinamese Javanese therefore in this case might have already developed such a conceptualization for the grammatical role of *nang* as a Path_Prep for a locative construction. This grammaticalization of *nang* however does not result in the creation of

new form, but just influence the increase of frequency/obligatorification of *nang* by the Surinamese Javanese.

To sum up, in the case of increasing frequency of the preposition *nang,* two mechanisms may have worked simultaneously, namely cross-linguistic interference from the contact language and a grammatical reanalysis of the preposition by the Heritage speakers. The former in this case is likely to foster the occurrence of the latter.

CHAPTER 5. CONCLUSIONS AND FUTURE DIRECTION

5.1 Conclusions

This research is intended to compare the use of locative constructions between the Heritage speakers of Javanese in Suriname and Homeland speakers of Javanese in Java Island. Specifically, this research is interested in finding the possibility of divergence between the two varieties, as well as convergence between the Heritage variety and the contact languages, i.e. Dutch and Sranantongo. On this account, the chapters of this thesis have presented both quantitative and qualitative analysis of the data acquired from oral elicitation of Frog Story Narratives. It is expected that the results of the analysis will allow us to answer the research questions stated in the introduction:

1. How do Surinamese Javanese and Java Javanese express locative constructions?
2. If any differences take place, could it be explained on the account of language contact?

In answering the first question, an analysis was carried out ion syntactic and lexical levels. The result of syntactic analysis suggests that both varieties still basically use the same structures in expressing locative constructions, for both the positional or motion descriptions. Nonetheless, there is a notable difference in terms of frequency between the two varieties in their usage of those structures, as it is evident from the result of the quantitative analysis. On this account, it is likely that the Heritage variety shows a stronger preference for simple constructions for both positional and motion descriptions. In addition, the Heritage variety also shows a high productivity for the use of multiple verbs constructions in conveying motion descriptions.

In the lexical level, both varieties are also basically alike in regard to the use of path-expressing preposition in expressing locative constructions, for both the positional and motion descriptions. It is only in the case of source-type movement that both varieties show a distinct selection of the aforementioned preposition. The difference is, however, only manifested in the usage of different variants of the preposition. In addition, the Heritage variety also seems to overgeneralize the use of the general locative marking nang ‘LOC’, especially in conveying positional description, resulting further in its high frequency of usage.

The findings in both the syntactic and the lexical level suggest that there are indeed differences in the way Heritage speakers of Javanese in Surinamese and Homeland speakers of Javanese in Java Island express locative constructions. It is argued that these differences are mainly caused by a contact with the dominant languages, i.e. Dutch and Sranantongo. The language contact, on this account, has led to the occurrence of divergence between the Java Javanese and Surinamese

Javanese, and at the same time convergence of Surinamese Javanese toward the dominant languages in contact. The sources of the divergence and convergence will be further specified to answer the second question.

It is important to note that the differences between the two varieties are not manifested in the creation of new structures or lexicons, but more in the emergence of change in frequency, overgeneralization, simplification, and different usage of a particular path-expressing preposition, as mentioned in the previous paragraphs.

The change in frequency, as it is attested in the use of multiple verbs constructions, is assumed to root in cross-linguistic interference from one of the contact languages, namely Sranantongo. The Surinamese Javanese, in this regard, is likely to copy the frequency of the aforementioned unit from the grammar of the Sranantongo into their Heritage grammar. This copying probably occurs as the speakers of Surinamese Javanese try to lighten their cognitive load in remembering and using two language systems in both Sranantongo and Javanese in regard to the use of locative constructions.

Another phenomenon which may also root from cross-linguistic interference is overgeneralization usage of general locative marking *nang* 'LOC'. On this account, the speakers of Surinamese Javanese undergo a grammatical reanalysis of the aforementioned marking in that it becomes a preferable option in expressing locative constructions. It is likely that the reanalysis is specifically triggered by the existence of its counterpart *na* 'LOC' which also functions as general locative marking in Sranantongo.

The simplification is assumed to be caused by the universal principle of language contact which favors simple construction (Moro, 2016). On this account, the grammar of Javanese spoken in Suriname is restructured due to an internal process, not from any external cause. It does not suggest, however, that external cause does not play a role in the emergence of simplification in Surinamese Javanese. In fact, the internal change is in some cases triggered by the exterior root such as the preference of on simple structure in Dutch or Sranantongo. In spite of the fact that universal principles work in the different system to cross-linguistic interference, it is very likely that they both work together under the universal principle of language in contact setting.

As for the difference in the usage of particular path-expressing preposition may be better addressed to the result of different input acquired by the Heritage speakers. On this account, the choice of the lexicon by the speakers of Surinamese Javanese may reflect the choice of the preposition of the first generation, which can be uncommon in the contemporary usage by Homeland speakers of Javanese.

The previous discussion on the sources of divergence and convergence in Surinamese Javanese shows, therefore, that the differences can indeed be explained on the account of language contact. Those findings, however, is not an end-results of the development of Javanese spoken in Suriname since the process of contact with the dominant languages is still ongoing. Thus, further studies in this field are encouraged.

5.2 Future Directions

This research focuses mainly on analyzing the occurrence of locative constructions on the basis of data acquired from oral elicitation from narrative texts. It is, therefore, possible for the future studies to keep exploring this grammatical area from other sources, such as existing videos, conversation, or translation works.

Future studies can also keep on investigating this area by adding more variables; one of which is the place of residence. The previous studies analyzing other Heritage languages have discovered a relation between the place of residence and the proficiency of the Heritage speakers on their Heritage language. On this account, the higher the proficiency the speakers get will influence their flexibility in expressing the location constructions. This relation, however, is beyond the scope of discussion on the present study. Future studies, therefore, may specifically take this variable into account in examining the occurrence of locative constructions in Javanese spoken in Suriname.

Another relation which can be explored is between the generations of Heritage speakers and the pattern of locative constructions they produce. An in-depth between-participants comparison in this research has shown that the older generations have more complete competence due to the age difference in that they can come up with more diverse selections of constructions and lexicons. Since age difference does give an important influence toward the result of data elicitation, it is, therefore, reasonable to expect similar outcome from the generational difference. The current research, nonetheless, does not put any special attention on this variable. Thus, it would be interesting should future studies take this variable into account.

The current thesis has also discovered a difference in regard to the selection of path-expressing preposition by the two varieties. It is assumed that this distinction is rooted in the different type of inputs acquired by the Heritage speakers. On this account, the Heritage speakers are likely to reflect the lexical selection of the first generation. The historical explanation of the development of Javanese in the early immigrant setting is required to substantiate this claim. Future study, therefore, may also focus in unraveling this inquiry.

Furthermore, the present study has also found out the occurrence of a change in frequency in regard to the use of multiple verb constructions in describing motion events. These findings are in accordance with previous studies analyzing the same domain (Lestiono, 2012; Villerius 2017). In agreement with the previous researchers, the author of this research has also argued that this occurrence may be best addressed to root in cross-linguistic interference from the dominant language, i.e. Sranantongo, which favors the aforementioned constructions. The preference toward this constructions, therefore, seems to be prevalent in Surinamese Javanese. Although the occurrence of the change in frequency toward the aforementioned constructions is evident in the current research, our data base is not quite large enough. Future studies, therefore, may keep exploring this field by selecting more scenes in the Frog Story narratives.

Lastly, the current research also only focuses on investigating one grammatical area, namely the use of locative constructions. Future studies, therefore, may investigate other domains which are also subject to change in language contact setting, such as phonological change, morphological change, and code-switching.

REFERENCES

Aalberse, Suzanne & Francesca Moro. 2014. Stability in Chinese and Malay Heritage languages as a source of divergence. In Kurt Braunmüller, Steffen Höder, & Karoline Kühl (eds). *Stability and divergence in language contact: factors and mechanisms*, 141-161. Amsterdam: John Benjamins Publishing Company.

Al-Baldawi, Wasan N. & Ahmad M. Saidat. 2011. Linguistic overgeneralization: a case study. *International Journal of Academic Research in Business and Social Sciences* 1, 184-193.

Au, Terry K., Leah M. Knightly, Sun-Ah Jun, & Janet S. Oh. 2002. Overhearing a language during childhood. *Psychological Science* 13(3), 238-243.

Auer, Peter & Jürgen Erich S. (eds.). 2010. *Language and space : An international handbook of linguistic variation*. Berlin: De Gruyter Mouton.

Backus, Ad M. 1996. *Two in one: Bilingual speech of Turkish immigrants in the Netherlands* Tilburg: Tilburg University Press.

Benmamoun, Elabbas, Silvina Montrul, & Maria Polinsky. 2010. Prolegomena to Heritage linguistics. http://www. nhlrc. ucla. edu/pdf/HL-whitepaper. pdf. (1 June, 2017)

Blake, Robert. 1983. Mood selection among Spanish-speaking children, ages 4 to 12. *Bilingual Review/La Revista Bilingüe* 10(1), 21-32.

Borges, Robert. 2013. Linguistic archaeology, kinship terms, and language contact in Suriname. *Anthropological Linguistics 55*(1), 1-35.

Borges, Robert. 2014. The role of extralinguistic factors in linguistic variation and contact-induced language change among Suriname's Coppename Kwinti and Ndyuka Maroons. *Acta Linguistica Hafniensia* 45(2), 228-246.

Borges, Robert. 2015. *Surviving the Middle Passage : The West Africa-Surinam Sprachbund,* vol 275. Berlin: De Gruyter Mouton.

Brehmer, Bernhard & Agnieszka Czachór. 2010. *A case study of two groups of Polish-German bilinguals*. Hamburg: Hamburg University workshop on Incomplete Acquisition and Language Attrition.

Buchstaller, Isabelle, Anders Holmberg, & Mohammad Almoaily (eds.). 2014. *Pidgins and creoles beyond Africa-Europe encounters.* Amsterdam: John Benjamins Publishing Company.

Bullock, Barbara E., Almeida Jacqueline Toribio, & Mark Amengual. 2014. The status of S in dominican spanish. *Lingua* 143(2). 20-35.

Cablitz, Gabriele H. 2006. *Marquesan : A grammar of space*. In Volker Gast, Walter Bisang, Jan Terje Faarlund, Hans Henrich Hock, Natalia Levshina, Heiko Narrog, Matthias Schlesewsky, Amir Zeldes, and Niina Ning Zhang*Trends* (eds.)*, Linguistics. Studies and Monographs, 169.* New York: Mouton de Gruyter.

Compagnon, Betty L. 1984. Interference and overgenereralization in second language learning : The acquisition of english dative verbs by native speakers of French. *Language Learning* 34(3), 39-57.

Comrie, Bernard, Gerald Stone & Maria Polinsky. 2003. *The Russian language in the twentieth century*. Oxford: Clarendon press.

Croft, William. 2000. *Explaining Language Change: An Evolutionary Approach*. Harlow: Longman.

Dixon, Robert M. 2008. Grammatical reanalysis: An example of linguistic change from Warrgamay (north Queensland). *Australian Journal of Linguistics* 1(1), 91-112.

Doğruöz, Seza & Ad Backus. 2007. Postverbal elements in immigrant turkish: Evidence of change? *International Journal of Bilingualism* 11(2), 185-220.

Enfield, Nick J. 2003. *Linguistic epidemiology: Semantics and grammar of language contact in Mainland Southeast Asia*. London: Routledge.

Essegbey, James. 2005. The "basic locative construction" in Gbe languages and Surinamese Creoles. *Journal of Pidgin and Creole Languages* 20(2), 229-268.

Foley, William & Mike Olson. 1985. Clausehood and verb serialization. In Johanna Nichols & Anthony Woodbury (eds.), *Grammar inside and outside the clause,* 17-60. Cambridge: Cambridge University Press.

Gass, Susan M. 2008. *Second language acquisition: an introductory course.* New York: Routledge.

Goodluck, Helen, Eithne Guilfoyle & Sile Harrington. 2006. Merge and binding in child relative clauses: The case of Irish. *Journal of Linguistics* 42(3), 629-661.

Grinevald, Colette. 2006. The expression of static location in a typological perspective. In Maya Hickman & Stephane Robert (eds.), *Space in Languages: Linguistics Systems and Cognitive Categories, 29-58.* Amsterdam: John Benjamins Publishing Company.

Guasti, Maria T. & Anna Cardinaletti. 2003. Relative clause formation in Romance child's production. *Probus* 15(1), 47-89.

Gutierrez, Manuel J. 2003. Simplification and innovation in US Spanish. *Multilingua* 22, 169-184.

Heine, Bernd & Tania Kuteva. 2003. On contact-induced grammaticalization. *Studies in Language 27*(3), 529.

Heine, Bernd & Tania Kuteva. 2008. Constraints on contact-induced linguistic change. *Journal of Language contact* 2(1), 57-90.

Huwaë, Rosita. 1992. *Tweetaligheid in Wierden: het taalgebruik van jongeren uit een Molukse gemeenschap.* Amsterdam: Universiteit van Amsterdam MA Thesis.

Jarvis, Scott & Aneta Pavlenko. 2008. *Crosslinguistic influence in language and cognition*. New York: Routledge

Johanson, Lars. 2002. Contact-induced change in a code-copying framework. *Contributions to the Sociology of Language* 86, 285-314.

Laleko, Oksana V. 2010. *The syntax-pragmatics interface in language loss: Covert restructuring of aspect in Heritage Russian.* Minnesota, MN: University of Minnesota.

Lefebvre, Claire (ed.). 2011. *Creoles, their substrates, and language typology,* vol. 95. Amsterdam: John Benjamins Publishing Company.

Lestiono, Rizky. 2012. *Spatial Relations in Frog Story Narratives: A Comparative Study between Surinamese Javanese and Java Javanese.* Nijmegen: Radboud University MA Thesis.

Levinson, Stephen C. 1997. Language and cognition: The cognitive consequences of spatial description in Guugu Yimithirr. *Journal of Linguistic Anthropology* 7(1), 98-131.

Lord, Carol. 1993. Historical change in serial verb constructions, vol. 26. Amsterdam: John Benjamins Publishing Company.

Martínez-Mira, María. I. 2009. Spanish Heritage speakers in the southwest: Factors contributing to the maintenance of the subjunctive in concessive clauses. *Spanish in context 6*(1), 105-126.

Matisoff, James A. 1973. *The grammar of Lahu,* vol. 75. Berkeley, CA: University of California Press.

Mayer, Mercer. 1969. *Frog, where are you?* New York: Dial Press.

Montrul, Silvina. 2009. Knowledge of tense-aspect and mood in Spanish Heritage speakers. *International Journal of Bilingualism* 13(2), 239-269.

Montrul, Silvina. 2010. Current Issues in Heritage Language Acquisition. *Annual Review of Applied Linguistics* 30, 3-23.

Montrul, Silvina. 2011. Morphological errors in Spanish second language learners and Heritage speakers. *Studies in Second Language Acquisition* 33(2),163-192.

Montrul, Silvina. 2012. Is the Heritage language like a second language? *Eurosla Yearbook* 12(1), 1-29.

Montrul, Silvina & Melissa Bowles. 2009. Back to basics: incomplete knowledge of differential object marking in Spanish Heritage speakers. *Bilingualism: Language and Cognition* 12(3), 363-383.

Moro, Francesca R. 2016. Dynamics of Ambon Malay: Comparing Ambon and the Netherlands. Utrecht: LOT.

Muysken, Pieter. 1987. *Neutrality in code mixing*. In Eigen en Vreemd. Identiteit en ontlening in taal, literatuur en beeldende kunst (Handelingen van het 39e Nederlandse Filologencongres), 359-373. Amsterdam: Vrije Universiteit Publishing.

Nagy, Naomi & Alexei Kochetov. 2013. *Voice onset time across the generations: A cross-linguistic study of contact-induced change.* Amsterdam: John Benjamins

Nagy, Naomi. 2016. Heritage languages as new dialects. *The Future of Dialects: Selected papers from Methods in Dialectology XV*, 15-34.

O'Grady, William, On-Soon Lee & Jin-Hwa Lee. 2011. Practical and theoretical issues in the study of Heritage language acquisition. *Heritage Language Journal* 8(3), 23-40.

Valk, Pelin O. 2015. *Transformation in Dutch Turkish Subordination? Converging evidence of change regarding finiteness and word order in complex clauses*. Utrecht: LOT.

Palmer, Bill. 1999. *Referring to space: Studies in Austronesian and Papuan Languages*. Oxford: Clarendon Press.

Patkowski, Mark S. 1980. The sensitive period for the acquisition of syntax in a second language. *Language learning 30*(2), 449-468.

Polinsky, Maria. 2006. Incomplete acquisition: American Russian. *Journal of Slavic linguistics* 14(2), 191-262.

Polinsky, Maria. 2007. Heritage languages: In the 'Wild' and in the classroom. *Language and Linguistics Compass* 1(5), 368-395.

Polinsky, Maria. 2008. Gender under incomplete acquisition. *Heritage Language Journal* 6(1), 40-71.

Polinsky, Maria. 2011. Reanalysis in adult Heritage language: A case for attrition. *Studies in Second Language Acquisition* 33(2), 305-328.

Potowski, Kim, Jill Jegerski & Kara Morgan-Short. 2009. The effects of instruction on linguistic development in Spanish Heritage language speakers. *Language Learning* 59(3), 537-579.

Ráhka, Sandra N. 2013. *Grammar competence in Lule Sami L1 and L2 young speakers: An investigation of consonant gradation, the grammar of spatial expressions and personal pronouns marked for dual*. Trondheim: Norges teknisk-naturvitenskapelige universitet thesis.

Setiyanto, Aryo B. 2010. *Parama Sastra Bahasa Jawa*. Yogyakarta : Panji Pustaka.

Silva-Corvalan, Carmen. 1994. *Language Contact and Language Change: Spanish in Los Angeles*. Oxford: Clarendon Press.

Slobin, Dan I. 2004. The many ways to search for a frog. *Typological and contextual perspectives,* 219-257.

Sweetser, Eve. 1996. Changes in figues and changes in grounds: A note on change predicates, mental spaces and scalar norms. *Cognitive Studies* 3(3), 75-86.

Takashima, Hideyuki. 1987. *Natural Acquisition Processes and Transfer: a case study*. Tokyo: Taishukan Shoten.

Talmy, Leonard. 1985. Lexicalization patterns: Semantic structure in lexical forms. *Language typology and syntactic description 3*(99), 36-149.

Talmy, Leonard. 1991. Path to realization: A typology of event conflation. *Berkeley Working Papers in Linguistics*17(1), 480-519.

Talmy, Leonard. 2012. Main verb properties. *International Journal of Cognitive Linguistics* 3(1), 1.

Thomason, Sarah G. & Terrence Kaufman. 1988. *Language contact, creolization and genetic linguistics*. Berkeley and Los Angeles: University of California Press.

Van den Berg, Margot C. 2000. *A grammar of Early Sranan.* University of Amsterdam dissertation.

Van Deusen-Scholl, Nelleke. 2003. Toward a definition of Heritage language: Sociopolitical and pedagogical considerations. *Journal of Language, Identity, And Education* 2(3), 211-230.

Van Staden, Miriam, Melissa Bowerman & Mariet Verhelst. 2006. Some properties of spatial description in Dutch. In Stephen C. Levinson, & David P. Wilkins (eds.), *Grammars of Space*, 475-511. Cambridge: Cambridge University Press.

Villerius, Sophie. 2017. Developments in Surinamese Javanese. In Kofi Yakpo & Pieter C. Muysken (eds.), *Boundaries and Bridges: Language Contact in Multilingual Ecologies*, 151-178. Berlin: De Gruyter Mouton.

Vruggink, Hein D. 2001. *Surinaams-Javaans-Nederlands woordenboek*. Leiden: KITLV Press.

Wilner, John. 1994. *Wortubuku fu Sranantongo: Sranantongo–English dictionary.* Paramaribo: SIL.

Winford, Donald. 2003. *An introduction to contact linguistics*. London: Wiley-Blackwell.

Winford, Donald & Ingo Plag. 2013. Sranan structure dataset. In Michaelis, Susanne Maria & Maurer, Philippe & Haspelmath, Martin & Huber, Magnus (eds.), A*tlas of Pidgin and Creole Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://apics-online.info/contributions/2, Accessed on 2017-07-20.)

Wu, Xinxin. 2011. Application of Figure and Ground Theory to Translation in Single Clause. *Theory and Practice in Language Studies* 1(11), 1655-1658.

Yakpo, Kofi & Pieter Muysken. 2014. Language change in a multiple contact setting: The case of Sarnami (Suriname). In Isabelle Buchstaller, Anders Holmberg & Mohammad Almoaily (eds.), *Pidgins and Creoles beyond Africa-Europe encounters*, 101–140. Amsterdam: John Benjamins Publishing Company.

Yakpo, Kofi, Margot van den Berg & Robert Borges. 2015. On the Linguistic Consequences of Language Contact in Suriname: The Case of Convergence. In Etithne B. Carlin, Bettina Migge & Paul B. Tjon Sie Fat (eds.), *In and out of Suriname: Language, mobility and identity*, 164-195. Leiden: Brill Publishers.

Zavala, Robert. 2006. Serial verbs in Olutec (Mixean). In Aĭkhenval′d, Aleksandra I͡Ur′evna, and Robert Malcolm Ward Dixon (eds), *Serial verb constructions: A cross-linguistic typology*. 273-300. Oxford: Oxford University Press.