ACCULTURATION THROUGH CODE-SWITCHING LINGUISTIC ANALYSIS IN THREE SHORT-STORIES: "INVIERNO", "NILDA" AND "THE PURA PRINCIPLE" (DÍAZ 2012)

ACULTURACIÓN A TRAVÉS DEL ANÁLISIS LINGÜÍSTICO DEL CAMBIO DE CÓDIGO EN TRES HISTORIAS: «INVIERNO», «NILDA» Y «THE PURA PRINCIPLE» (DÍAZ 2012)

MARÍA JESÚS SÁNCHEZ
Universidad de Salamanca
mjs@usal.es

ELISA PÉREZ-GARCÍA
Universidad de Salamanca
elisapg@usal.es

Abstract

The purpose of this article is to investigate whether Yunior, a character and narrator in the three short stories under study, "Invierno", "The Pura Principle", and "Nilda", becomes absorbed into American culture or obtains a positive relationship with this culture without losing his Dominican identity. Quantitative analyses of the vocabulary in the L1 code-switches (Spanish) and of the L2 (English) vocabulary used by Yunior in the stories were carried out to appraise his linguistic progression. Code-switching was analyzed because it gives insights into how situation and context influences language use and why the characters use the language they do. The results obtained, by means of three common lexical measures used in foreign language research (lexical density, age of acquisition and lexical sophistication), allowed us to assess Yunior's change of identity. According to the acculturation model, Yunior becomes acculturated in the host country, showing progression and integration with many cultural aspects of American life and the English language due to his formal education and early age of acquisition of L2.

Keywords: code-switching, identity, acculturation, lexical density, age of acquisition.

María Jesús Sánchez and Elisa Pérez-García

Resumen

El propósito de este artículo es comprobar si Yunior, personaje y narrador en los tres relatos que se analizan, "Invierno", "The Pura Principle" y "Nilda", se acultura a la cultura estadounidense u obtiene una relación positiva con esta cultura sin perder su identidad dominicana. Para evaluar la progresión lingüística de Yunior se llevó a cabo un análisis cuantitativo del vocabulario utilizado por él en los relatos en su cambio de código a la L1 (español) y del vocabulario en la L2 (inglés). El cambio de código se analizó porque ayuda a entender cómo la situación y el contexto influyen en el uso del lenguaje y en por qué los personajes usan el lenguaje que usan. Los resultados obtenidos, con tres medidas léxicas utilizadas normalmente en la investigación de lenguas extranjeras (densidad léxica, edad de adquisición y sofisticación léxica), nos permitieron valorar el cambio de identidad de Yunior. De acuerdo con el modelo de aculturación, Yunior se acultura en el país anfitrión, mostrando una progresión e integración con muchos aspectos culturales de la vida estadounidense y el idioma inglés debido a la educación formal y a una edad temprana de adquisición de la L2.

Palabras clave: cambio de código, identidad, aculturación, densidad léxica, edad de adquisición.

1. Introduction

This study concerns the linguistic analysis of literary code-switching in three short stories by Junot Díaz (2012).[1] Despite the fact that literary code-switching is a frequent feature of literary texts used in different languages and times such as in Roman literature (Mullen 2015), the English literary tradition from its beginnings until the present time (Schendl 2015), and contemporary Brazilian literature (Müller 2015), it is an under-developed phenomenon in research. Bilingual Hispanic-American writers have used it with profusion and thanks to them the investigation of this type of switching has become more important (Gardner-Chloros and Weston 2015). Nonetheless, this phenomenon should not be considered as exclusive to Latin American literature. Literary code-switching has been 'legitimated' (Montes-Alcalá 2015) to a certain extent due to its strong resemblance to switches in natural speech production at socio-pragmatic and psycholinguistic levels, and its study can be a complement to the switches based on natural speech (Weston and Gardner-Chloros 2015).

Code-switching (CS) and language varieties in literature (Meisel 2014) become critical for issues which deal with culture and identity because they can show how characters self-identify by the language they use and "offer a perfect bridge to

discuss language ideologies" (Devereaux and Wheeler 2012: 96). A personal use of two languages, the heritage (Spanish) and the host language (English), either as a character or narrator (the case of Yunior in the stories under study), can be a valuable source to perceive linguistic evolution and possible changes in identity throughout these stories without being confused by the existence of opposing points of view that other characters could offer. In the stories chosen for analysis, "Invierno", "The Pura Principle", and "Nilda" (Díaz 2012), the last two overlapping in time, Yunior determines the story's point of view (as first person narrator) and at the same time participates in the action (as a character). This facilitates a better tracking of his use of English and his CS, taking this term in a broad sense (Dumitrescu 2014; Hall and Nilep 2015), and of the evolution of his identity. His personal participation in the plot does not allow the reader to forget that he is involved in the events and that all the information presented is filtered through his personal perspective, which is related to his degree of acculturation. Yunior's relations and the language he uses, either English (L2) or Spanish (L1), being a main component of cultural identity, determine who he is as an individual in his community and his progressive acculturation to the Anglo world. The linguistic analysis of CS in this study is relevant since the aim is to uncover whether Yunior (Junot's alter ego, Dumitrescu 2014: 413), character and narrator in the three short stories, becomes acculturated to the American culture, showing, as a result, a progressive preference for the English language.

2. Literature Review on Code-switching and Acculturation

2.1. Code-switching (CS)

The use of two languages in communication between multilingual speakers has been the subject of research in the sociolinguistic field in the past decade (Fachriyah 2017; Beatty-Martínez et al. 2018). Much of the research conducted nowadays with bilinguals concerns aspects dealing with CS within the fields of psycholinguistics and sociolinguistics. In psycholinguistics the research deals with the partial activation of the two languages in bilinguals, a process that supposedly facilitates CS production, while in sociolinguistics it mainly focuses on CS as a strategy to shape acculturation and bicultural identity (Cox et al. 2019).

The three types of studies discussed below provide a general overview and represent the backbone of this study. Essentially, these studies address the relationship between CS and language proficiency, CS and the reduction in cognitive effort when the speaker has a large exposure to the language, and finally the use of a second language (L2) for cold and detached interaction.

a) CS and language proficiency. CS should not be linked to an inability to differentiate the two language systems or to a lack of knowledge of the second language (Lipski 2014; Montes-Alcalá 2015; Yow et al. 2017). Though it is well established in bilingual literature that there is a link between proficiency and CS, still more studies are needed to determine in what way proficiency affects CS. In the literature in the field, proficiency and the frequency of CS have been associated (Torres 2007; Weston and Gardner-Chloros 2015; Beatty-Martínez et al. 2018), and more proficient individuals have been perceived as frequent users of their L2 in their bilingual speech as proficiency decreases in their L1 (Torres and Potowski 2016; Cox et al. 2019). It can also be stated that as a result of proficiency in the L2, there is a relationship between CS and the type of switching used: insertion, alternation or congruent lexicalization (Muysken 2000). The general idea is that CS begins with small insertions and evolves towards alternation and large insertions (Lipski 2014).

b) CS and cognitive effort. CS can be produced spontaneously (Cox et al. 2019), and sometimes bilinguals are aware of their linguistic behavior (Lipski 2014). Nonetheless, research agrees that CS requires more effort than staying in one language due to the simultaneous control of both languages (Beatty-Martínez et al. 2018; van Hell et al. 2018). Beatty-Martínez et al. (2018), who incorporated experimental contributions done with eye-tracking and event-related potential (ERPs) methodologies in their review of CS, called the slower processing, which happens as a result of moving back and forth between two different codes, the 'processing cost' (10). They concluded that the cognitive effort depends on the type of CS used and bilinguals' experience with the language, and that switching costs can be reduced if the speaker has a large exposure to a given code-switched structure or code-switches freely. This last idea is supported by Bruin et al. (2018), who found that freely using two languages can be less effortful than staying in one language. Van Hell et al. (2018), also working with ERPs, claimed that processing costs are always present in bilinguals independently of the degree of proficiency in the language in which they produce the code-switches.

c) CS and detachment. The use of CS, regardless of the effort involved, is associated with the transmission of feelings in the different speech acts. This linguistic behavior, that is, switching between languages while becoming emotional with known interlocutors (intimate and familiar domains), has been strongly supported by recent literature investigating the emotional force of multilinguals' various languages (Pavlenko 2008; Dewaele 2010; Ferré et al. 2010; Costa et al. 2017). As a general rule, though it is not always

the norm, bilinguals choose the L1 to express their emotions, and the L2 for a colder, more distant, and more detached interaction (Dewaele 2005). According to the different roles played by languages in multilingual societies, L2 would be used for more objective and colder expression, while the L1 would be for subjective and intimate situations (Dewaele 2010; Ferré et al. 2010; Jończyk et al. 2016; Costa et al. 2017). The intimacy that happens with L1 in different areas such as games, moral judgement, decision making, etc. is also perceived in consumer preferences. In a code-switched advertisement, in which the influence of acculturation and language was examined (Garcia Quintana and Nichols 2016), it was found that the bicultural consumer preferred the advertisement that was more closely related to his/her L1. The authors linked this result to the relationship which exists between language and the degree of acculturation and concluded that the more acculturated the individuals were, the more inclined they felt to accept L2 language advertisements.

These three types of academic contributions are part of the theoretical foundation for this study. The basic idea that underlies it is that a long time spent in a host country using the L2 as the main language and acquiring a new culture will produce a progressive a) reduction of CS to the L1 and b) acculturation to the adopted culture.

63

2.2. Acculturation

In this section we consider ideas related to acculturation in order to explain the possible change produced in language use (L1/L2) as a result of adopting new values and habits in a new place.

The development of identity in individuals with a long-term exposure to the host culture (Fu 2015), e.g. migrant characters, asylum seekers, expatriates, and ethnic minorities (Rahiminezhad and Arabian 2018), has been studied from a multidimensional view of acculturation. Acculturation is a common process and normally happens over multiple generations. Therefore, first generation migrants (the ones who moved to another country after the age of 14) do not acculturate completely to their adopted country's values. Nonetheless, as Mesoudi (2018) says, the degree of acculturation can change depending on different traits, and these can shift substantially in the same population.

Researchers call readers' attention to the term assimilation and other new terms such as 'biculturalism', 'multiculturalism', 'globalization', etc., being used as synonyms, and therefore interchangeably, with the most generic (Fu 2015) and preferable term: 'acculturation'. This refers to the social, psychological, and cultural change produced after intercultural contact (Panicacci 2020). Widely

accepted definitions convey the same ideas about acculturation. For example, Rahiminezhad and Arabian (2018: 45) talk about it as the phenomenon which results "when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns". Though it gives the impression that the authors restrict their definition to the alteration in cultural frames, acculturation is necessarily linked to all types of changes. Acculturation may pertain to a range of different phenomena which can include likes, changes in self-definition and deep psychological processes (Mesquita et al. 2019). Fu (2015), who tries to discriminate among differences in the three related concepts of adaptation (also known as conformity, Mesoudi 2018), adjustment and acculturation, emphasizes the psychological side of acculturation, recognizing that the first users of this term were mainly psychologists. Apart from the psychological side, acculturation often conveys visible changes in language, customs, food, and clothing, showing the foreign individuals two coexisting cultural identities since they adopt, to varying degrees, the dominant host culture in specific domains: behavior, values, and/or identity (Rahiminezhad and Arabian 2018). Its effects can be noticed in both the original (native/heritage) and newly adopted (host) culture and, as a result, when individuals accommodate to the native and the host culture, alterations in self-identity are produced (Panicacci 2020).

Some aspects of the psychological impact of being bicultural have only been addressed theoretically while others have received a great deal of controlled study (LaFromboise et al. 1993). These researchers carried out a very exhaustive review of the literature on this topic and examined several models of second-culture acquisition which are not mutually exclusive: assimilation, acculturation, alternation, and fusion. In our research, in which identity development is examined through CS to L1, and vocabulary used in the L2, what happens is more closely related to the acculturation and alternation models. It probably has little to do with assimilation because, as LaFromboise et al. (1993) claim, the underlying assumption is "that a member of one culture loses his or her original cultural identity as he or she acquires a new identity in a second culture" (396); nor with fusion, since once fused "the individual's psychological reality would be indistinguishable from a member of the majority group" (401), and these aspects are not seen in the analyzed stories. The acculturation and alternation models are related to the multicultural model, which promotes a pluralistic approach in the relationship existing between cultures. Identity in our study can be related to the positive scenario depicted by LaFromboise et al. (1993). Their main conclusion was that it was possible to obtain a positive relationship with cultures without losing one's sense of identity or having to choose one culture over the other; this is what the alternation model suggests (LaFromboise et al. 1993). In this

multicultural model the individual can also develop a strong orientation to the host culture; the accommodation of both cultures, the host and heritage cultures, normally brings changes in self-identity and, as a result, acculturation.

Years later Recker et al. (2017), considering Berry's (2005) well known acculturation strategies of integration, assimilation, separation, and marginalization depending on the orientation to the cultural heritage and the interaction with the host culture (maintaining both / detachment from both / showing a strong orientation to the heritage / showing a strong orientation to the host culture) put the emphasis on the motivations which underlie the behavior of migrants. For them, it was important to research this topic because in their view there was a lack of studies dealing with motivation. They found that the motivation for cultural maintenance with the features of conservation and stability was related to ethnic peer connections and produced psychological adaptation, while the motivation for cultural exploration with the features of openness and change was related to national peer connections and produced sociological adaptation and a better ability to "fit in" (10).

It is worth mentioning that numerous different disciplines including psychology, sociology and education have analyzed the impact of being born in one culture and raised in another (biculturalism) from the point of view of second culture acquisition. Empirical research carried out with Chinese-English bilinguals in the United States (Jiang et al. 2009), of considerable interest because it deals with acculturation and with language use, found that language proficiency and use are related to processes of "sociocultural integration and identity formation" (Hammer 2017: 43). These researchers suggest strong links between acculturation and linguistic performance in the L2. The results of Hammer's research indicate that those who acculturate to a higher level use L2 more frequently, even in familiar and private domains, and that the language used at home can change with time and length of residence in the host country. Another revealing classic investigation (Birman and Trickett 2001) looked at the process of acculturation through three different dimensions, language competence, behavioral acculturation, and cultural identity with first-generation Soviet Jewish refugee adolescents. It showed that acculturation occurs in a linear pattern over time for most dimensions. In this case acculturation to the American culture increased and acculturation to the Russian culture decreased. The results were completely different for older migrant generations (parents) whose Russian language competence was not reduced even after a long period of residence in the host country. Therefore, both a deep understanding of the L2 and the age of acquisition (AoA) have a lot to do with the degree of acculturation of foreign migrants and how they feel about the host country, either in terms of attachment or detachment. The feelings of exclusion/

65

belonging to the host country are supposedly connected with the way the person internalizes the experience. It is generally recognized that living in two cultures could be psychologically undesirable if the experience provokes ambiguity and identity confusion. However, from a very different perspective, it is considered that it could bring long-term benefits for the individual and for society, as stated by Recker et al. (2017). These researchers maintain a positive attitude towards the phenomenon, seeing advantages for those living between two cultures because the motivation to maintain the heritage culture and also to explore the host culture is linked to positive outcomes. A benefit can also be produced when new ways of doing things and knowledge brought by migrants is recombined with existing skills and knowledge (Mesoudi 2018). Probably, as already suggested, the psychological and social adaptation to a new space could bring an evolution in L2 and a reduction in the use of L1 and code-switches, an idea that is in line with acculturation-related literature (Devereaux and Wheeler 2012; Hozhabrossadat 2015; Garcia Quintana and Nichols 2016; Zaker 2016).

3. Research Questions and Hypotheses

Having in mind the above theoretical ideas, and considering the character of Yunior as a "first generation migrant" (Mesoudi 2018: 3) due to his early arrival in the United States and the number of years living there with formal education, the research questions which arise in this study are:

1. Does Yunior become bicultural and maintain his original identity and the new one without being forced to choose one over the other (alternation)?
2. Does Yunior's identity change due to acculturation to the American culture?

The hypotheses that are raised, considering the research questions, are the following:

1. Yunior's identity, shaped by language, will share relevant features with those of his parents and relatives from the Dominican Republic, and at the same time he will participate in the dominant host culture (alternation).
2. Yunior will probably identify with the new context and develop competence in both the dominant culture and its language as he grows up in the United States (acculturation).

Since communication is one of the most important aspects to define identity, Yunior's cultural 'linguistic identity' (Hozhabrossadat 2015) will be analyzed through a linguistic study. Specifically, it will be checked whether the code-switches to his L1 lead to a progressive reduction of Spanish words from the first

chronological story ("Invierno") to the third ("Nilda"), whether he is looking for solidarity or distancing from Latin speakers (convergence/divergence, attachment/ detachment, Hozhabrossadat 2015), and whether the English he uses comes closer to that employed by a native speaker.

For the code-switches, two different lexical variables are used, as explained in the Methodology section: Lexical density (LD) and AoA of the terms. To assess Yunior's English linguistic progression (character/narrator), a quantitative analysis of his sophistication in English will be done with *VocabProfile Classic* (Cobb 2002; Heatley et al. 2002), a program based on Laufer and Nation's (1995) 'Lexical Frequency Profile' (LFP) which breaks the texts down by word frequencies as represented by their frequencies in a corpus. This program was not used for the Spanish code-switches because it does not work with the Spanish language.

4. Methodology

4.1. Materials

Three short stories from *This Is How You Lose Her* (Díaz 2012) are examined. Though this book contains nine stories, we only analyzed "Invierno", "The Pura Principle" and "Nilda" because in all of them Yunior is a participant in the story's action (character) and the one who determines the story's point of view (first person narrator). This feature allows a better tracking of the CS and of the evolution of his cultural identity.[2]

Information on Spanish vocabulary comprising types, tokens, translation, category and AoA are provided as supplementary material in an Appendix.

4.2. Instruments

The first step in analyzing the code-switches from English into Spanish was to identify the Spanish vocabulary within the stories. The three texts were submitted to the software *AntConc* (Anthony 2014) which provided the total number of words, the number of different words (tokens and types), the frequency of occurrence, and contextual information. A manual count of words in Spanish was done and then their morpho-syntactic categories were decided, considering contextual information. As this program did not recognize apostrophes in the Saxon genitive or contractions, or accents in the Spanish words, we removed the extra types and tokens that the software had introduced and did a manual count of types and tokens eliminating forms that did not count as a separate word in English (e.g. the letter *d* from contractions like *you'd* which appeared alone. In this case *you'd* was replaced by *you would* or *you had* depending on the context).

The English translations of the Spanish terms presented in the supplementary material were taken from the online *Merriam-Webster Dictionary*, while *El Diccionario Dominicano* and the *Dominican English Dictionary* were used for the translations of Dominican words.

4.3. Measures

Quantitative data were obtained through the most common lexical measures used in foreign language research: LD and AoA of the Spanish words in the code-switches, and lexical sophistication with LFP of the English vocabulary:

a) LD is a robust measure defined as the percentage of lexical words (nouns, verbs, adjectives, and adverbs) in the text (van Hout and Vermeer 2007). It gives information about how informative a text is and can be used to monitor improvements in the use of lexical items when different texts are compared. It is obtained by multiplying the number of lexical tokens by 100 and dividing it by the total number of tokens (number of lexical tokens*100/total number of tokens). A text can be considered dense if it has many lexical words relative to the total number of words (lexical and grammatical words).

b) AoA is a psycholinguistic variable referring to the age at which a word is typically learned. It is related to the frequency of a word, therefore Brysbaert and Ghyselinck (2007: 992) say that there is a "near perfect correlation between the magnitude of the AoA effect and the magnitude of the frequency effect".

The scores obtained by Alonso et al. (2015) for 7,039 Spanish words were considered in order to obtain the average AoA in each story. We only used the scores of those words whose forms were the same as in the text, except when there were differences in number (e.g. *sucias* in the text, *sucia* in the set of norms). In this way *borracha* was not considered because it was not in the list compiled by these authors. Though they had the score for *borracho* we disregarded it, since we have checked that the ratings change with gender. The same thing happened with variations in verbal tenses (e.g. *consentido* in the text, *consentir* in the set of norms) and familiarity (e.g. *Papi* in the text, *papá* in the norms reported here).

c) The sophistication of the English vocabulary in the three stories, a particular aspect of lexical richness related to frequency (Laufer and Nation 1995), was obtained through the *VocabProfile Classic* program. Using this reliable and valid measure of lexical use (LFP), which discriminates proficiency levels as stated by its authors (Laufer and Nation 1995), we obtained the percentage of words at different vocabulary frequency levels. This information enabled us to assess the sophistication of Yunior's vocabulary.

68

5. Results

5.1. Quantitative Analysis of the Spanish Vocabulary in the Code-Switches Produced by Yunior

Surprisingly, the percentage of Spanish types and tokens is not high in spite of the impression the reader can get when reading these short stories. It seems that Spanish 'invades' (Dumitrescu 2014: 413) with numerous words due to the continuous repetitions of some of these words such as proper nouns (e.g. Rafa, Nilda, etc.), and names to describe family relations such as *Papi*, *Mami*, and *hermano*, but the truth is quite the opposite. The texts contain a reduced number of Spanish words in the code-switches (types), and those words have a very low frequency (tokens).

The three stories were submitted to *AntConc* (Anthony 2014) to acquire the total number of types and tokens (L1+L2) in each story, the number of words in the code-switches in Spanish, and the percentage in each story for the types and tokens considering all the words. We did not use the *type/token ratio* (also known as *lexical variation*) because it has to do with text length and not with lexical richness. This is important in our case in which the numbers of types and tokens vary substantially between the texts being compared (van Hout and Vermeer 2007). Though this measure is the most popular when dealing with foreign languages, it is not reliable (van Hout and Vermeer 2007) and is unstable for short texts because it is affected by differences in text length (Laufer and Nation 1995). For these reasons, we considered a more robust measure to discriminate the lexical richness of the Spanish code-switches in the three short stories: LD.

As we can see in Table 1, "Invierno", the first chronological story, had the largest LD, while the figures were quite similar for the other two temporal overlapping stories. The largest number in the first story suggests a direct correspondence between LD and CS. The decrement in LD for the Spanish words in the code-switches in "The Pura Principle" and "Nilda" supports the thesis that Yunior's linguistic acculturation to English takes place due to immersion, and to the number of years living in a country other than where he was born.

Stories	Lexical density
"Invierno"	Tokens 98*100/100=98
"The Pura Principle"	Tokens 114*100/122=93.44
"Nilda"	Tokens 21*100/23=91.30

Table 1. LD of Spanish words in the code-switches

We also used the average AoA of the words in Spanish (Table 2 below). This measure, which deals with acquisition order (van Hout and Vermeer 2007), has to do with the frequency of words and refers to "the average chronological age at which a particular word is first learned, thus reflecting the word's time of entrance into the lexical repertoire of an individual" (Alonso et al. 2015: 268). Its effects in lexical decisions (Morrison and Ellis 2000), normally showing faster and more accurate recognition times, are strongly associated with lexical accessibility (Alonso et al. 2015). The words which have been learnt early in the L2 will probably be common and frequent words, being therefore more accessible. Those learnt later, in adolescence or adulthood, will be more sophisticated (less frequent and related to adult topics) and less accessible, especially when one is immersed in a foreign culture and having a formal education in the second language. Alonso et al's. (2015) scores for Spanish words were used to obtain the average AoA in each story. There were a few words, restricted to the Dominican environment, which were not in their norms. This was so because they do not include ratings for dialectal variations or different types of Spanish. However, considering that there are not many of these words in the three short stories, the loss is likely to be small. We found 2 in "Invierno" (*pernil* and *moro*), 8 in "The Pura Principle" (*aguajero, boricua, chin, deguabinao, estribao, manganzón, prieta* and *toto*), and 3 in "Nilda" (*cuero, tígueres* and *mota*). Though the AoA norms used in this research (Alonso et al. 2015) show a high correlation with a set of words for Argentinian speakers of Spanish (Manoiloff et al. 2010), researchers should be cautious when using these scores with Spanish vocabulary in regions other than Spain. Nonetheless, as Alonso et al. (2015) suggest, considering the high scores obtained by Cuetos et al. (2012) with participants from different professional backgrounds and those obtained by Kuperman et al. (2012) with no effects of educational level on AoA ratings, this seems to be an unimportant concern.

Stories	AoA
"Invierno"	4.32
"The Pura Principle"	4.70
"Nilda"	4.61

Table 2. AoA average of Spanish words in the code-switches

The two measures reveal a bigger LD and an inferior AoA for the Spanish code-switches in "Invierno", which suggests a direct correspondence between these two variables and CS. This means that at an early period Yunior's (character/narrator) vocabulary is closer to the Spanish culture and language, changing progressively as he acculturates to the Anglo word. At this early stage he shows attachment to terms

related to early learnt content words such as survival items (food). He talks about the typical food his mother cooks (e.g. *moro*, *pernil*) because food is linked to keeping humans and their culture alive, it is "a crucial aspect of human identity and one of the most effective means of expressing and communicating this identity" (Faber and Vidal Claramonte 2017: 157). The idea of his acculturation is reinforced by the quantitative analysis of the English vocabulary in each of the three stories, which becomes increasingly closer to the English used by English native speakers.

5.2. Quantitative Analysis of the English Vocabulary Used by Yunior

The three stories were submitted to the *VocabProfile Classic* program to obtain the percentage of English words a speaker uses at different vocabulary levels. To help in the interpretation of data, it can be useful to consider that the less proficient speaker is less likely to use rare vocabulary, and the main distinction between less proficient and advanced speakers should be between the first 1,000 frequent words, the second 1,000 more frequent words, and the words in the Academic Word List (AWL), which is vocabulary "that is not in the first 2,000 words of English, but is frequent and has wide range across a variety of written academic texts from a variety of disciplines" (Laufer and Nation 1995: 312). A reasonable percentage for an intermediate level would be: 75% (first 1,000), 10% (second 1,000), 10% (AWL), 5% (not in any list, e.g. foreign words). In our case the percentages are displayed in Table 3:

Stories	First 2,000 Words (1,000+1,000)	AWL Words
"Invierno"	90.07 (83.41+6.66)	.59
"The Pura Principle"	89.27 (84.51+4.76)	.85
"Nilda"	90.84 (85.68+5.16)	.68

Table 3. Percentages of English words pertaining to K-1, K-2, and AWL

It is obvious that in the three stories there is a wide use of words belonging to the first 1,000 most frequent words. The percentages together with those for the second 1,000 more frequent words exceed the 85% that an intermediate level speaker would use. The picture is very different for the words belonging to the AWL, which in all cases is far below 5%. However, it can be observed that the percentage increases in the two last chronological and temporal overlapping stories, "The Pura Principle" and "Nilda", and this increase is probably related to the continuous formal education received by Yunior and the amount of time spent by him in the United States. These data, together with the lower LD of the Spanish words in these two stories and their superior AoA, lead to a change in Yunior's

linguistic behavior from that in "Invierno". This change can be explained through the fluency he has gained in the English language. From this position of superiority, he criticizes Hispanic speakers (e.g. his mother's lack of linguistic evolution in the L2). As Gerke (2015) claims, he finds his identity in detaching himself from characters who, unlike him, are not expressing themselves in English. A clear hint of his detachment and progressive linguistic superiority is the way he expresses himself when he speaks to the people who are close to him: freely mixing Spanish and English (e.g. *prieta*-ness or *mami*'s) or at other times using very fluent English.

6. Discussion and Conclusions

The results obtained through quantitative linguistic analyses of the Spanish words in the code-switches and of the English vocabulary used in the three stories enable us to reach conclusions regarding Yunior's change of identity. The results can be interpreted as evidence of acculturation. They indicate that he has drawn close to the dominant American culture, confirming the second hypothesis (acculturation) and therefore rejecting the first one (alternation). According to the acculturation model (LaFromboise et al. 1993), he has become a competent participant in the majority culture and its language in this multicultural place: the United States. Though he could be considered a member of the minority (Dominican) culture by his ethnic peers, he has progressively adopted the American culture from the first chronological story "Invierno" to the last two temporal overlapping stories without experiencing a psychological conflict. It has been a personal choice since he has not been forced to choose between the Latin or the North American culture. Yunior (character/ narrator) has become acculturated showing development and a strong orientation towards the English language due to his length of stay in the USA, his formal education received in the L2 and also the early AoA of this language.

Yunior's acculturation correlates with the fluency he has gained in the English language which goes hand in hand with mastering this language. He lives surrounded by a Hispanic bilingual community, but he has chosen to detach himself from these people. A clear hint of detachment is the way he expresses himself when he speaks to the people who are close to him. This linguistic superiority allows him to objectively establish a social criticism of the Latin people permanently settled in their new homeland. Despite his critical attitude, Yunior shows both a psychological adaptation in the United States maintaining the connection with his ethnic peers and a sociocultural adaptation through his American connections (Recker et al. 2017).

This study represents an advance for studies related to the under-developed phenomenon of literary CS, being an addition to this under-researched field since

it legitimizes the use of valuable academic contributions taken from bilingual or multilingual environments. Moreover, the great similarity that exists between literary CS and that which occurs in natural speech production at socio-pragmatic and psycholinguistic levels can also encourage consideration of this type of switching as a complement to the switches that occur in natural speech.

Funding

Acknowledgements

Notes

1. The general term code-switching is used in this study to refer to literary code-switching as well.

2. In the story "The Sun, the Moon, the Stars" Yunior is also character and narrator, but in almost a third of the pages the action takes place in Santo Domingo. Therefore, when Yunior remembers the different events the amount of CS increases disproportionately, not following the normal course of the narrative. Its inclusion would imply a distortion in the study under research, and it is the reason why this story is not analyzed despite belonging to *This Is How You Lose Her* (Díaz 2012).

Works Cited

Alonso, M. Angeles, Angel Fernandez and Emiliano Díez. 2015. "Subjective Age-of-acquisition Norms for 7,039 Spanish Words". *Behavior Research Methods* 47: 268-274.

Anthony, Laurence. 2014. *AntConc*. <http://www.laurenceanthony.net/software/antconc>. Accessed January 10, 2019.

Beatty-Martínez, Anne. L., Jorge Valdés Kroff and Paola E. Dussias. 2018. "From the Field to the Lab: A Converging Methods Approach to the Study of Codeswitching". *Languages* 3: 1-19.

Berry, John W. 2005. "Acculturation: Living Successfully in Two Cultures". *International Journal of Intercultural Relations* 29: 697-712.

Birman, Dina and Edison J. Trickett. 2001. "Cultural Transitions in First-generation Immigrants Acculturation of Soviet Jewish Refugee Adolescents and Parents". *Journal of Cross-Cultural Psychology* 32: 456-477.

Bruin, Angela de, Arthur G. Samuel and Jon Andoni Duñabeitia. 2018. "Voluntary Language Switching: When and Why Do Bilinguals Switch between Their Languages?" *Journal of Memory and Language* 103: 28-43.

Brysbaert, Marc and Mandy Ghyselinck. 2007. "The Effect of Age of Acquisition: Partly Frequency Related, Partly Frequency Independent". *Visual Cognition* 13: 992-1011.

Cobb, Thomas. 2002. "Web Vocabprofile". <http://www.lextutor.ca/vp/eng/>. Accessed March 18, 2019.

Costa, Albert, Marc Lluís Vives and Joanna D. Corey. 2017. "On Language Processing Shaping Decision Making". *Current Directions in Psychological Science* 26: 146-151.

Cox, Jessica G., Ashley LaBoda and Najee Mendes. 2019. "'I'm Gonna Spanglish it on You': Self-reported vs. Oral Production on Spanish-English Codeswitching". *Bilingualism: Language and Cognition* 23 (2): 446-458.

Cuetos, Fernando, Tamara Samartino and Andrew W. Ellis. 2012. "Age Acquisition Norms for Elderly Spanish People: Characteristics and the Prediction of Word Recognition Performance in Alzheimer's Disease". *Psicológica* 33: 59-76.

Devereaux, Michelle D. and Rebecca Wheeler. 2012. "Code-switching and Language Ideologies: Exploring Identity in Dialectally Diverse Literature". *English Journal* 102: 93-100.

Dewaele, Jean-Marc. 2005. "Investigating the Psychological and Emotional Dimensions in Instructed Language Learning: Obstacles and Possibilities". *The Modern Language Journal* 89: 367-380.

Dewaele, Jean-Marc. 2010. *Emotions in Multiple Languages*. Basingstoke, UK: Palgrave Macmillan.

Díaz, Junot. 2012. *This Is How You Lose Her*. New York: Penguin.

Dominican English Dictionary. <https://casadecampoliving.com/dominican-english-dictionary-titua>. Accessed February 15, 2019.

Dumitrescu, Domnita. 2014. "'Dude was figureando hard'. El cambio y la fusión de códigos en la obra de Junot Díaz". In Enrique-Arias, Andrés, Manuel J. Gutiérrez, Alazne Landa and Francisco Ocampo (eds.): 397-432.

El Diccionario Dominicano. <http://www.thatsdominican.com/dominican-lingo>. Accessed January 18, 2019.

Enrique-Arias, Andrés, Manuel J. Gutiérrez, Alazne Landa and Francisco Ocampo. (eds.) 2014. *Perspectives in the Study of Spanish Language Variation*. Santiago: Servicio de Publicaciones de la Universidad de Santiago de Compostela.

Faber, Pamela and Carmen África Vidal Claramonte. 2017. "Food Terminology as a System of Cultural Communication". *Terminology* 23: 155-179.

Fachriyah, Eva. 2017. "The Functions of Code Switching in an English Language Classroom". *Studies in English Language and Education* 4: 148-156.

Ferré, Pilar, Teófilo García, Isabel Fraga, Rosa Sánchez-Casas and Margarita Molero. 2010. "Memory for Emotional Words in Bilinguals: Do Words Have the Same Emotional Intensity in the First and in the Second Language?" *Cognition and Emotion* 24: 760-785.

Fu, Kefeng. 2015. "A Brief Review on Acculturation Strategies of Overseas Students". *English Language Teaching* 8: 121-127.

Garcia Quintana, Ashley E. and Cynthia A. Nichols. 2016. "Code Switching and the Hispanic Consumer: The Effects of Acculturation on the Language of Advertising among Hispanics". *Hispanic Journal of Behavioral Sciences* 38: 222-242.

Gardner-Chloros, Penelope and Daniel Weston. 2015. "Code-switching and Multilingualism in Literature". *Language and Literature* 24: 182-194.

Gerke, Amanda. 2015. "Walking out on Language: Verbal Spaces in Junot Díaz's 'Invierno'". *Revista de Estudios Norteamericanos* 19: 83-97.

Hall, Kira and Chad Nilep. 2015. "Code-switching, Identity, and Globalization". In Tannen, Deborah, Heidi Hamilton and Deborah Schiffrin (eds.) *The Handbook of Discourse Analysis*. Malden, MA: Blackwell: 597-619.

Hammer, Kate. 2017. "They Speak What Language to Whom? Acculturation and Language Use for Communicative Domains in Bilinguals". *Language and Communication* 56: 42-54.

Heatley, A., Paul Nation and Averil Coxhead. 2002. "RANGE and FREQUENCY programs". <http://www.victoria.ac.nz/lals/staff/paul-nation.aspx>. Accessed March 18, 2019.

Hozhabrossadat, Sepideh. 2015. "Linguistic Identities: How Code-switching and/or Code-crossing Help Constructing Solidarity or Otherness in Multilingual Societies". *International Journal of English Literature and Culture* 3: 194-198.

Jiang, Mei, Raymond J. Green, Tracy B. Henley and William G. Masten. 2009. "Acculturation in Relation to the Acquisition of a Second Language". *Journal of Multilingual and Multicultural Development* 30: 481-492.

Jończyk, Rafal, Bastien Boutonnet, Kamil Musiał, Katie Hoemann and Guillaume Thierry. 2016. "The Bilingual Brain Turns a Blind Eye to Negative Statements in the Second Language". *Cognitive, Affective & Behavioral Neuroscience* 16: 527-540.

Kuperman, Victor, Hans Stadthagen-Gonzalez and Marc Brysbaert. 2012. "Age-of-acquisition Ratings for 30,000 English Words". *Behavior Research Methods* 44: 978-990.

LaFromboise, Teresa, Hardin L.K. Coleman and Jennifer Gerton. 1993. "Psychological Impact of Biculturalism: Evidence and Theory". *Psychological Bulletin* 114: 395-412.

Laufer, Batia and Paul Nation. 1995. "Vocabulary Size and Use: Lexical Richness in L2 Written Production". *Applied Linguistics* 16: 307-322.

Lipski, John M. 2014. "Spanish-English Code-switching among Low-fluency Bilinguals". *Sociolinguistics Studies* 8: 23-55.

Manoiloff, Laura, Marcela Artstein, María Belén Canavoso, Laura Fernández and Juan Segui. 2010. "Expanded Norms for 400 Experimental Pictures in an Argentinian Spanish-speaking Population". *Behavior Research Methods* 42: 452-460.

Meisel, Jürgen. 2014. "Heritage Language Learners: Incomplete Acquisition of Grammar in Early Childhood". In Enrique-Arias, Andrés, Manuel J. Gutiérrez, Alazne Landa and Francisco Ocampo (eds.): 435-463.

Merriam-Webster Dictionary. <https://www.merriam-webster.com>. Accessed February 16, 2019.

Mesoudi, Alex. 2018. "Migration, Acculturation, and the Maintenance of between-group Cultural Variation". *PLOS ONE* 13: 1-13.

Mesquita Batja, Jozefien De Leersnyder and Alba Jasini. 2019. "The Cultural Psychology of Acculturation". In Cohen, Dov and Shinobu Kitayama (eds.) *Handbook of Cultural Psychology*. New York: Guilford Press: 502-536.

Montes-Alcalá, Cecilia. 2015. "Code-switching in US Latino Literature: The Role of Biculturalism". *Language and Literature* 24: 264-281.

Morrison, Catriona M. and Andrew W. Ellis. 2000. "Real Age of Acquisition Effects in Word Naming and Lexical Decision". *Bristish Journal of Psychology* 91: 167-180.

Mullen, Alex. 2015. "'In Both Our Languages': Greek-Latin Code-switching in Roman Literature". *Language and Literature* 24: 213-232.

Müller, Katharina B. 2015. "Code-switching in Italo-Brazilian Literature from Rio Grande do Sul and São Paulo: A Sociolinguistic Analysis of the Forms and Functions of Literary Code-switching". *Language and Literature* 24: 249-263.

Muysken, Pieter. 2000. *Bilingual Speech: A Typology of Code-mixing*. Cambridge: Cambridge U.P.

Panicacci, Alessandra. 2020. "Does Expressing Emotions in the Local Language Help Migrants Acculturate?" *International Journal of Language and Culture* 6: 279-304.

Pavlenko, Aneta. 2008. "Emotion and Emotion-laden Words in the Bilingual Lexicon".

Bilingualism: Language and Cognition 11: 147-164.

RAHIMINEZHAD, Vida and Soheila ARABIAN. 2018. *Acculturation, Otherness and Return in Adichi's Americanah*. Cambridge: Cambridge Scholars Publishing.

RECKER, Claudia, Taciano L. MILFONT and Colleen WARD. 2017. "A Dual-process Motivational Model of Acculturation Behaviors and Adaptation Outcomes". *Universitas Psychologica* 16: 1-15.

SCHENDL, Herbert. 2015. "Code-switching in Early English Literature". *Language and Literature* 24: 233-248.

TORRES, Lourdes. 2007. "In the Contact Zone: Code Switching Strategies by Latino/a Writers". *MELUS* 32, 75-96.

TORRES, Lourdes and Kim POTOWSKI. 2016. "Hablamos los dos in the Windy City: Codeswitching among Puerto Ricans, Mexicans and MexiRicans in Chicago". In Guzzardo Tamargo, Rosa E., Catherine M. Mazak and Carmen Parafita Couto (eds.) *Spanish-English Codeswitching in the Caribbean and the US*. Amsterdam: John Benjamins: 83-105.

VAN HELL, Adriana, Carla B. FERNANDEZ, Gerrit J. KOOTSTRA, Kaitlyn A. LITCOFSKY and Caitlin Y. TING. 2018. "Electrophysiological and Experimental-behavioral Approaches to the Study of Intra-sentential Code-switching". *Linguistic Approaches to Biligualism* 8: 211-231.

VAN HOUT, Roeland and Anne VERMEER. 2007. "Comparing Measures of Lexical Richness". In Daller, Helmut, James Milton and Jeanine Treffers-Daller (eds.) *Modelling and Assessing Vocabulary Knowledge*. Amsterdam: Benjamins: 121-138.

WESTON, Daniel and Penolope GARDNER-CHLOROS. 2015. "Mind the Gap: What Code-switching in Literature Can Teach Us About Code-switching". *Language and Literature* 24: 194-212.

YOW, W. Quin, Jessica S.H. TAN and Suzanne FLYNN. 2017. "Code-switching as a Marker of Linguistic Competence in Bilingual Children". *Bilingualism: Language and Cognition* 21 (5): 1075-1090.

ZAKER, Alireza. 2016. "The Acculturation Model of Second Language Acquisition: Inspecting Weaknesses and Strengths". *Indonesian EFL Journal* 2 (2): 80-87.

Appendix: Supplementary Material

INFORMATION OF THE SPANISH VOCABULARY PRODUCED BY YUNIOR: Types, tokens, translation, category and AoA. * has been used for Dominicanisms.

"INVIERNO"

Types and translation	Tokens	Morphosyntactic Category	AoA
barrio (neighborhood)	1	noun	5.66
bueno (good)	1	adj.	2.82
de (of)	1	prep.	4.16
gran (big)	1	adj.	5.18
gringo (gringo)	2	noun	–
gringos (gringos)	2	noun	–
guaguas (guagua) (buses)	1	noun	4.40
hijo (son)	1	noun	3.08
la (the)	1	art.	3.14
malecón (pier)	1	noun	–
malo (bad)	1	adj.	3.36
mami (mum)	35	noun	–
merengue (merengue)	1	noun	6.47
* moro (dish with beans)	1	noun	–
muchacho (boy)	1	noun	–
papi (dad)	45	noun	–
pelo (hair)	1	noun	2.60
* pernil (roast pork butt)	1	noun	–
puta (whore)	1	noun	6.74
zángano (lazy)	1	adj.	-–

"THE PURA PRINCIPLE"

Types and translation	Tokens	Morphosyntactic Category	AoA
* aguajero (one who speaks a lot and does nothing)	1	adj.	–
Ave-María (Hail Mary)	1	interj.	–
* boricua (Puerto Rican)	1	adj.	–
bueeeeeennnnnoooo (goodddddddddd)	1	adj.	2.82
caballero (gentleman)	1	noun	6.72

campesina (peasant)	2	noun	–
campo (country)	2	noun	4.48
* chín (a little)	1	adj.	–
chulo (cool)	1	adj.	7.80
consentido (spoilt)	1	adj.	–
cubano (Cuban)	1	noun	–
de (of)	3	prep.	4.16
* deguabinao (tired)	1	adj.	–
Doña (Mrs)	5	noun	6.02
Dios (God)	1	noun	3.90
* estribao (confused)	1	adj.	–
favor (favor)	1	noun	5.58
figureando (boasting)	1	adj.	–
flan (crème caramel)	1	noun	4.56
gente (people)	1	noun	4.20
guapísima (very beautiful)	1	adj.	–
hijo (son)	3	noun	3.08
indiecita (little native Indian)	1	noun	–
la (the)	1	article	3.14
loco (crazy)	1	adj.	4.66
madres (mothers)	1	noun	2.34
Mami (Mum)	52	noun	–
* manganzón (immature person)	1	adj.	–
mayo (may)	1	noun	5.30
mierda (shit)	1	noun	4.56
mono (monkey)	1	noun	2.90
no (no)	3	adv.	1.86
novela (novel)	1	noun	7.26
papi (daddy)	1	noun	–
plaza (square)	1	noun	5.38
por (for)	1	prep.	4.56
* prieta (dark haired)	1	adj.	–
pura (pure)	1	adj.	8.66
puta (whore)	1	noun	6.74
querido (dear)	1	adj.	–
rabo (tail)	1	noun	4.18
respeto (respect)	1	noun	5.90
santísimo (blessed)	1	noun	–

78

Señora (Mrs.)	1	noun	4.32
sodas (soda) (sodas)	1	noun	6.98
sucias (dirty)	1	adj.	4.18
tacita (little cup)	1	noun	–
tetas (boobs)	2	noun	3.44
tía (aunt)	2	noun	3.12
tías (aunts)	2	noun	3.12
* toto (vagina)	1	noun	–
tú (you)	1	pronoun	–
un (a)	1	article	–
vieja (old, mother)	2	adj.	–
yerba (weed)	1	noun	–

"NILDA"

Types and translation	Tokens	Morphosyntactic category	AoA
* cuero (whore)	1	noun	–
enamorao (enamorado) (lover)	1	adj.	7.62
foto (picture)	1	noun	3.62
novias (novia) (girlfriend)	1	noun	5.94
vieja (old, mother)	2	adj.	4.78
mami (mum)	7	noun	–
moreno (dark)	2	adj.	4.56
morena (dark)	1	adj.	4.91
* tígueres (street boy)	1	adj.	–
* mota (cannabis)	1	noun	–
borracha (drunk)	1	noun	–
paso (step)	1	noun	3.92
Claro (the expression 'Claro que sí' means of course)	1	interj.	5.84
que	1	interj.	3
sí	1	adv.	1.98