Gender Agreement in a Language Contact Situation

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Abstract: Gender agreement between determiners and nouns, and gender agreement between third-person clitics and their referents, are notoriously difficult to acquire by bilingual speakers who lack them in their first language, or in one of their first languages. We present a study that explores the differences between gender agreement between a determiner and a noun and gender agreement between clitics and antecedents or doubled DPs among Shipibo-Spanish speakers. The oral production data that were elicited from 17 adult Shipibo-Spanish bilinguals by using a picture-based narration task show a notable difference in the agreement patterns between nouns and determiners, and between clitics and their antecedents/doubled DPs. Similar patterns are found among five Spanish-Shipibo bilinguals who were living in the same contact situation. While the participants consistently marked strong gender agreement within the DPs, a lack of gender specification was found in the agreement between clitics and antecedents or doubled DPs in the clitic-doubling and dislocated structures. These results are not unexpected as they mirror the results from previous work, where the clitic gender does not systematically match the antecedent gender, especially with feminine antecedents or doubled DPs. Furthermore, this study confirms previous evidence that the gender-specific clitics, lo/la, have been replaced by the invariable clitic, le, in contexts where agreement with a doubled DP or an antecedent is expected. In contrast, there is evidence of agreement between determiners and nouns in this group of bilinguals. These facts allow us to conclude that, although gender is present in Shipibo-Spanish bilingual speakers’ grammar, it is largely absent and is not operative in Shipibo-Spanish speakers’ clitic agreement in oral production.

Keywords: clitic agreement; syntax; bilingualism; language contact

1. Introduction

Gender agreement is a notorious source of divergence in bilingual speakers (Tsimpli 2014; Montrul and Potoski 2007). Research on second-language learners (Bruhn de Garavito and White 2002; Franceschina 2005; Montrul et al. 2008; Alarcón 2011; Grüter et al. 2012) and heritage speakers (Montrul 2010, 2013) consistently shows that bilingual speakers exhibit significant levels of variability in production and receptive tasks that test gender agreement (Hur et al. 2020). Recently, this variability has been attributed to different factors, and among them are: differences in proficiency (Hopp 2013; Sagarra and Herschensohn 2010); lexical frequency effects (Franceschina 2005; Hur et al. 2020); incomplete acquisition (Montrul et al. 2008; Alarcón 2011); and the restructuring of the grammar (Scontras et al. 2018) (see Cuza and Sánchez 2022 for an overview of some of the most recent proposals among heritage bilinguals), among others.¹

Previous work on the acquisition of gender agreement in Romance languages has focused either on the agreement within the nominal domain, namely, the agreement between articles, nouns, and/or adjectives (White et al. 2004; Lynch and Polinsky 2018;
Rothman et al. 2018), or on the agreement between gendered pronominal forms and their antecedents (Martínez-Gibson 2011; Polinsky 2008). However, few studies have focused on both. Furthermore, many studies have been conducted among speakers who are bilingual in a language that lacks gender within the DP, but that has gender in third-person pronouns, and a language that has gender in both cases. In this study, we focus on individuals who are bilingual in Shipibo, a language that lacks gender marking in third-person pronouns and gender agreement within the nominal domain, and Spanish, a language that marks gender in both cases.

In a previous study, Sánchez et al., (Forthcoming) examined agreement between determiners and nouns (using a production task), as well as gender agreement between clitic pronouns and their antecedents or doubled DPs (using a picture-selection task), in the Spanish of Shipibo-Spanish bilinguals. This work was theoretically motivated by the need to test the Big DP analysis that was proposed by Uriagereka (1995); Cecchetto (1999); Belletti (2005); and Sportiche (1996), which is a syntactic hypothesis, according to which third-person clitics and determiners are generated within the same DP projection. This line of analyses accounts for: (a) The distribution of clitics and DPs in most clitic-doubling structures, with the exception of clitic left-dislocation structures; and (b) The similarities between clitics and definite determiners in grammatical and semantic properties, such as definiteness, gender, and number marking. Of relevance to the present study is that both clitics and determiners agree in gender, either with a noun phrase that may include an adjective in the case of the determiners, or with a doubled or dislocated DP in the case of clitics.

Sánchez et al. (Forthcoming) studied the extent to which Shipibo-Spanish bilingual speakers show gender agreement in clitics in a receptive task, given previous evidence of neutralization in the gender marking of clitics in the oral production of Shipibo-Spanish bilinguals (Mayer and Sánchez 2019). Sánchez et al. (Forthcoming) found evidence in favor of significant differences among Shipibo-Spanish bilinguals in gender agreement between determiners and nouns in an oral production task, on the one hand, and gender recognition of direct object clitics in a receptive task, on the other. The participants were more likely to produce gender between the determiner and the noun than to match the clitic gender with the picture of a noun that was referred to by the clitic in a receptive task, based on Grüter et al. (2012). Despite the relevance of these previous findings, three important aspects remain in need of further research: (a) Whether Shipibo-Spanish bilinguals show consistency in the same mode (oral production); (b) The availability of alternative pronominal forms such as, e.g., null pronouns in oral production; and (c) The extent to which gender agreement patterns align with number agreement patterns.2

In the present study, we focus on analyzing oral production data in Amazonian Spanish in contact with Shipibo to determine whether Shipibo-Spanish bilinguals are able to consistently produce agreement between determiners and nouns, and between a pronominal clitic and a doubled or left-dislocated DP or its antecedent. The fact that previous research comparing the two contexts of agreement used different task modes (receptive vs. oral) could, in principle, add extra variability across tasks that need to be controlled using the same task mode. Our main goal in this study is to determine whether oral production data in bilingual Shipibo-Spanish are consistent with previous evidence of the inability of a clitic to establish agreement in gender with a doubled or dislocated DP, as is found in Sánchez et al. (Forthcoming), using a receptive task, and with the ability to exhibit gender agreement between the determiner and the noun previously found using an oral task. Furthermore, in the previous study, the participants were given a receptive task with a choice between masculine lo and feminine la clitics to match an image, but the task did not allow for the observation of the occurrence of other clitics or null forms. To overcome the mismatch in the task modality, the present study focuses only on oral production as a way to obtain consistent data in a single mode and a more comprehensive view of what pronominal options are available beyond the clitic in Shipibo-Spanish bilingual speakers. It also investigates the production of alternative forms and whether number agreement
aligns with gender agreement patterns. In the following sections, we summarize the main assumptions that we make about DP-internal gender agreement and agreement between clitics and doubled or dislocated DPs in Spanish, which is followed by a brief sketch of the aspects of Shipibo grammar that are relevant to the study. We then move to the research questions that guide it, the methods that were employed, the results, and the discussion.

2. Agreement in Spanish and Shipibo-Konibo

2.1. Local vs. Long-Distance Gender Agreement in Spanish

Third-person accusative clitics in most varieties of Spanish encode feature specifications for gender, number, and definiteness, as is seen in (1)a–b. By contrast, dative clitics do not encode gender, as is seen in (1)c:

(1) a. L-a vi a ella.
   CL-FEM saw DOM her.FEM
   “I saw her.”
   b. L-g vi a él.
   CL-MASC saw DOM him.MASC
   “I saw him.”
   c. Le regalé a él/ella un libro.
   CL gave DOM him.MASC/her.FEM a book
   “I gave him/her a book.”

Different varieties of Spanish show complex and diverse variation in the distribution of third-person clitics (cf. Fernández-Ordóñez 1993, 1999; Camacho et al. 1995; Camacho and Sánchez 2002; Ormazabal and Romero 2013; Mayer and Sánchez 2016, 2019; Mayer 2013, 2017), with most of them having to do with case and animacy features; however, with few exceptions, lo and la encode gender and definiteness features in most varieties, whereas le lacks gender.

Third-person accusative clitics are similar to definite determiners, as is seen in Table 1. Both elements share a common l- root, followed by a gender morpheme (-o/-a) or an epenthetic -e. Although the parallelism is not perfect in the singular (el/lo), it has led some researchers to propose a unified analysis for both. In this line of analysis, clitics are generated as the determiners of a DP (Uriagereka 1995), which is an analysis that has subsequently been labelled as, “Big DP” (Cecchetto 2000; see also Belletti 1999, 2005; Ceccheto 1999; Leonetti 2008; Sportiche 1996).

Table 1. Parallelism between determiners and clitics.

| Determiner | 3p. Clitic |
|------------|-----------|
| MASC.SG    | el        | los (ACC) |
| FEM.SG     | la        | la (ACC)  |
| MASC.PL    | los       | los (ACC) |
| FEM.PL     | las       | las (ACC) |

According to these analyses, clitics are Ds that are generated under similar conditions to other Ds, and they should therefore exhibit similar distributional patterns (Uriagereka 1995). In the version of this proposal in (2), the clitic and the determiner head a DP whose complement is an NP, which can be generally null in the case of clitics. When the clitic is doubled, the doubled DP appears in the specifier of the DP.
The Big DP hypothesis provides a structure in which the gender agreement can take place locally. Agreement between the D and the N is possible because they are inside the same domain (DP). This is reflected in determiner–noun agreement, as in (3)a, and in the clitic-antecedent DP in (3)b. In this case, the clitic left-dislocated DP has moved from its base position to the periphery of the clause, following the proposal by Cecchetto (2000).

(3)  a. L-a niñ-a
    the-FEM girl-FEM
    “The girl”

b. A la niñ-a l-a vi.
   DOM the-FEM girl-FEM CL-FEM saw
   “The girl, I saw her.”

Since the view that clitic left dislocation involves movement from a clause-internal position has been challenged (v. Alexiadou 2017; summarizing arguments that go back to Cinque 1990; and also, Angelopoulous and Sportiche 2021), the alternative view is that the clitic and the DP argument are not generated in the same domain. In this view, while gender agreement between the determiner and the noun takes place locally inside the DP, agreement between the clitic and a doubled or dislocated DP is not local. If we follow the accepted view that the dislocated DP is not generated in a VP-internal position (Alexiadou 2017), then, in a sentence such as (3)b, agreement between the clitic and the dislocated DP is clearly nonlocal. In the case of doubled DPs, as in (4) below, the clitic would not be generated as an internal argument in the VP, but above this projection, as in previous proposals that treat the clitic as an object agreement marker (Suñer 1988; Franco 1993). In this sense, agreement between the clitic and the VP-internal DP would not be strictly local.

(4)  L-a vi a l-a niña.
     the-FEM saw DOM the-FEM girl-FEM
     “I saw the girl.”

The two approaches make different predictions. A Big DP type of analysis would predict no difference in the availability of gender agreement between determiners and nouns, on the one hand, and clitics and doubled DPs, on the other. An alternative analysis that treats gender agreement between the clitic and the DP as long-distance agreement, and agreement between the determiner and the noun as local agreement, predicts the possibility of a lack of agreement marking in long-distance cases, if, as is pointed out by Bhatt and Keine (2017), both types of agreement share morphological forms, but only long-distance agreement may be optional.

In this paper, we present a study that examines the availability of DP-internal gender agreement and gender agreement between a clitic and a doubled or a dislocated DP or an antecedent in the oral production of bilingual speakers of Amazonian Spanish in contact with Shipibo. We compare the gender agreement patterns inside traditional DPs with the gender agreement between a clitic and a doubled or dislocated DP, or between the clitic and its DP antecedent, as is shown in (5). The Big DP analysis is more consistent with the same patterns of agreement in structures (5)a and (5)b, as (5)b is assumed to be derived from (5)a. On the other hand, the theory that proposes that CLLD items are generated outside the VP would derive agreement either as local inside the DP (5)a, or as
long-distance between the clitic and its antecedent or a doubled DP (5)b. In this view, local and long-distance agreement involve different representations and could present different patterns. Of course, this does not preclude that the local and long-distance patterns could be similar, but, crucially, they will be derived by different mechanisms. The Big DP hypothesis, on the other hand, predicts that the DP internal and clitic-antecedent/doubled DP agreement patterns should be alike. In contrast to the Big DP hypothesis, dissimilar patterns would be more consistent with an analysis in which the clitic does not behave as a D and, if consistently unmarked for gender, could instead become an invariable object agreement marker. This account is also consistent with the positing difficulties in processing long-distance agreement in oral production as the source of the lack of gender agreement between the clitic and the DP.

\[(5) \quad \begin{align*}
a. & \left[ \text{DP} D_G \left[ \text{NP} N_G \right] \right] \\
b. & \left[ \text{CL}_G \text{ant}_G \right] \end{align*}\]

In previous work (cf. Sánchez et al. Forthcoming), we showed that while Shipibo-Spanish bilinguals generally exhibit consistent local gender agreement in oral production more than 90% of the time, their interpretation of agreement between the doubled/dislocated DP or antecedent and the clitic only reached up to 50% of cases, as is evidenced by the correct identification of an antecedent in a picture-based receptive task. We advanced two possible interpretations of these results: either clitic–antecedent agreement does not apply in the same way as determiner–noun agreement, or the clitics in the Shipibo-Spanish variety do not encode gender and can therefore not be used to correctly identify an antecedent on the basis of gender. As is mentioned above, one of the limitations of that study was the combination of a receptive picture-selection task to test the agreement between a clitic and a potential antecedent, and an oral production task to test the agreement between the determiner and the noun. Since bilinguals may exhibit differences between their receptive and oral production abilities (Giancaspro 2017; López Otero 2022), the mismatch could be attributed to task differences. In the present study, we analyze the oral production of determiner–noun and clitic–antecedent/doubled DP agreement in the same speakers. With data obtained in a single task mode (production), this study might shed light on one of those two explanations: If lo/la are not produced, it is likely that the Shipibo-Spanish grammar does not mark clitics with a gender feature. On the other hand, if lo/la are still produced but do not match the gender of the DP antecedent, then the agreement between the two may operate differently than determiner–noun agreement. Additionally, other alternatives to the gender-marked clitics may appear in oral production, such as null pronouns. Before presenting the research questions, we provide a brief sketch of Shipibo grammar as it pertains to pronominal forms and verb agreement.

2.2. Agreement in Shipibo-Konibo

Shipibo-Konibo is one of the thirty-two languages of the Panoan linguistic family (Fleck 2013). “Panoan” refers to a historical ensemble of the Shipibo, Konibo, and Xetebo languages that are spoken by indigenous groups in the Ucayali basin in Peru. Currently, this language is best known as, “Shipibo-Konibo”, or simply as, “Shipibo”. Shipibo is a predominantly agglutinating and suffixing language (Valenzuela 2003). The canonical sentences/clauses in Shipibo have a basic SOV/SV word order.

The nominal domain in Shipibo-Konibo consists of a noun head, which includes pronouns, nouns, and nominalized verbs (Valenzuela 2003). Additionally, an invariable modifier can be included, as is shown in (6)a–b. In Shipibo, nouns and pronouns do not encode gender, and the language has demonstratives, but lacks definite determiners.
As mentioned above, gender is not encoded in nouns. However, in the case of nouns that denote animate entities, a reference to gender can be added with a noun modifier. For humans, the words “ainbo” (“woman”) and “benbo” (“man”) are commonly used, and for animals, “awin” (“female, wife”), and “bene” (“male, husband”) (Valenzuela 2003). See the examples below.

The nouns and pronouns show other salient characteristics that are related to the ergative–absolutive alignment of the language. In ergative–absolutive languages, the subjects of intransitive verbs receive the same case marking as the objects of transitive verbs (absolutive case marking), which generates a system in which only the subject of a transitive verb is marked differently (ergative marking, see examples in (7)).

Thus, the pronominal system exhibits different pronouns for the ergative and absolutive cases, and the personal pronouns can be marked for person (first, second, and third) and number, as is shown in Table 2 below.

Table 2. Shipibo-Konibo personal pronouns (adapted from Valenzuela 2003, p. 185).

|       | Absolutive | Ergative |
|-------|------------|----------|
| 1SG   | ea         | en       |
| 2SG   | mia        | min      |
| 3SG   | ja         | jan      |
| 1PL   | noa        | non      |
| 2PL   | mato       | maton    |
| 3PL   | jato-jabo  | jaton-jabaon |
|       | jaboan     | jaboan-jaboon |

With regard to the ergative–absolutive alignment, the nouns with the ergative case show a variety of allomorphs: -n, -an, -en, -in, -kan, -ten, -tan, -man, -nin, -ton, and -tonin (Valenzuela 2010). The examples below show the difference between 1SG ergative (8)a and absolute (8)b. Likewise, the noun, kape (“alligator”), occurs with the suffix, -kan.
Given the lack of gender marking on nouns and pronouns and the fact that, in Shipibo, the case marking on nouns and pronouns follows an ergative–absolutive alignment, we can infer that the acquisition of gender encoding in determiners and pronouns could be challenging for native speakers of Shipibo who acquire Spanish as a second language, or who are simultaneous bilinguals but are dominant in Shipibo. In principle, the acquisition of gender agreement between determiners and nouns could prove difficult because it requires gender assignment to the nouns, and gender agreement between the noun and the determiner, and Shipibo lacks overt determiners. The acquisition of gender agreement between a pronominal accusative clitic and a doubled DP could also prove difficult, especially because of Shipibo’s ergative–absolutive alignment, which patterns differently from a nominative–accusative language such as Spanish, in which the objects of the transitive verbs are marked differently from the subjects, regardless of the transitivity of the verb. Finally, it has to be noted that Shipibo allows for null pronouns in the third person.

3. Research Questions

From a second/bilingual language acquisition perspective, gender is known to be a divergent property (Alarcón 2011; Keating 2010). The study of Shipibo-Spanish bilingual speakers allows us to test the acquisition of gender agreement between nouns and determiners and clitics and antecedents/doubled DPs in bilinguals, assuming that some level of feature reassembly of gender in bilingual Shipibo-Spanish takes place (Lardiere 2017; Grüter et al. 2012), due to the contact with Shipibo, such that, while gender features are part of the representation of Shipibo-Spanish determiners, they may not be part of the representation of Shipibo-Spanish pronominal clitics. Our goal is to determine firstly whether gender is present in bilingual Shipibo-Spanish, as is evidenced by determiner–noun agreement, and secondly, whether gender features are assigned to clitics, which renders the gender agreement between clitics and antecedents/doubled DPs operative. We explore the following research questions and hypotheses:

**Research Question 1.** Is there agreement between determiners and nouns among Shipibo-Spanish bilinguals in production data?

**Hypothesis 1.** Agreement between determiners and nouns holds in Shipibo-Spanish production data. This hypothesis is motivated by previous data and the notion that, if gender agreement becomes part of the Shipibo-Spanish representation, it will become evident in instances of determiner–noun agreement.

**Research Question 2.** Do clitics encode gender, and do they exhibit gender agreement with doubled or dislocated DPs or with antecedents in bilingual Shipibo-Spanish?

**Hypothesis 2.** Clitics do not encode gender in Shipibo-Spanish and, therefore, they cannot exhibit long-distance gender agreement with antecedents or doubled/dislocated DPs. This hypothesis is motivated by previous findings in Mayer and Sánchez (2019) that show that lo/la are mostly absent in the production of Shipibo-Spanish speakers, and the findings in Sánchez et al. (Forthcoming) that show that Shipibo-Spanish clitics and antecedents do not match in gender in a receptive task.
It is important to highlight that, up until now, there has not been a previous study that tests both gender agreement between determiners and nouns and between clitics and antecedents or doubled/dislocated DPs by using the same oral task.

4. Materials and Methods

The participants in this study were twenty-two Shipibo-Spanish bilinguals from Patria Nueva (Ucayali, Perú), who were aged 21–79 years, and who were living in a contact situation. They also participated in the previous study by Sánchez et al. (Forthcoming). The Shipibo-Konibo is one of the largest indigenous groups in the Peruvian Amazonian region. Approximately 25,232 members live along the main branch of the Ucayali River. Over the last decades, Shipibo-Konibo migration to urban centers, such as Pucallpa and Lima, has resulted in large urban Shipibo settlements. As a consequence, new networks that extend from rural to urban areas have increased Shipibo-Konibo–Spanish bilingualism in Shipibo and Amazonian Spanish.

The current research was conducted in the Native Community of Patria Nueva de Mediación Calleria (Calleria district, Coronel Portillo province, Ucayali region), located on the Calleria River, one of the Ucayali’s tributaries. The Shipibo probably settled this area in 1972 (Brabec de Mori 2015, p. 733), but the territory was only officially recognized by the Peruvian State in 1983 and was expanded again in 1997 (Instituto del Bien Común (IBC) 2016, p. 129). The early settlement of Patria Nueva, which consisted of two or three houses, grew after the primary school was established, which led to the arrival of more Shipibo from the Upper Ucayali area (Abel Mori, the first authority in the community. Personal communication). The current settlement includes a preschool, a primary school, and a secondary school, in addition to a Bilingual Intercultural Education program that is currently being developed with the participation of Shipibo teachers.

According to Brabec de Mori (2015, p. 733), there are 271 inhabitants in Patria Nueva. However, it is almost impossible to give a precise number because of the constant flow of people along the Calleria river basin. They are primarily of Shipibo-Konibo ethnicity, but they also include Nawa (mestizos in Spanish), who are usually non-Shipibo men who are married to Shipibo women. In addition, some mestizo educators and healthcare workers have a stable presence in the community, whereas others have a short seasonal presence that is connected with fishing or tourism. Finally, some mestizos are members of an evangelical community church that is led by a Shipibo pastor.

The population in Calleria changes because of the fishing and agricultural activities and the constant travel to and from nearby cities, such as Pucallpa, in order to visit relatives, settle temporarily, or acquire food supplies to complement what they can grow. This constant flux puts them in frequent contact with Spanish inside and outside the community.

Study Participants

Twenty-two Shipibo-Spanish sequential bilinguals from Patria Nueva, with an age range between 21 and 79, and including 17 self-reported native speakers of Shipibo and five self-reported native speakers of Spanish, were asked to narrate a story in Spanish after seeing a series of pictures on a computer screen that were adapted to be more culturally appropriate from Mayer and Mayer’s (1992) frog stories. The second group was included to provide information about the characteristics of the L1 Spanish input that L1 Shipibo speakers may receive inside their community. Their number is low because, as mentioned above, the majority of the inhabitants in Patria Nueva are ethnically Shipibo. Their results will only be included in the descriptive data, not in the statistical analysis. Among the native speakers of Shipibo, the age range of the acquisition of Spanish was between 6 and 13 years of age. However, one participant stated that his exposure to Spanish became more frequent only after the age of 20. Among the native speakers of Spanish, the age range of the acquisition of Shipibo was between 10 and 24 years of age. Their narratives were recorded and coded, and the sentences with transitive verbs were coded according to whether they had a clitic or not, and, for those that did, we coded if the clitic was an anaphoric clitic, a
clitic with a doubled constituent (CD), one with a left-dislocated constituent (CLLD), or one with a clitic right-dislocated constituent (CLRD). In those cases where clitics and DPs were part of the same clause (CD, CLLD, and CLRD), the determiner and the noun in the DP were coded for agreement in gender features, and the clitic and the DP were coded for agreement between the clitic and the DP expression. The participants also completed a linguistic background questionnaire, a proficiency task, and another experimental task as part of a study reported in Sánchez et al. (Forthcoming). The participants underwent several training rounds to familiarize themselves with the computer and the tasks. The male participants included eight Shipibo-Konibo and five mestizos. In contrast, all of the females (9) were Shipibo-Konibo, since all of the mestizo inhabitants are male in the Patria Nueva Native Community, as mentioned earlier.

5. Results

Twenty-two participants produced a total of 350 transitive verbs in main clauses. Overall, the L1 Shipibo–L2 Spanish speakers produced 178 direct object DPs that had a gendered determiner and a noun. Out of those 178, 79% had masculine nouns, and 21% had feminine nouns. They exhibited consistent agreement patterns between determiners and nouns: 88% of the DPs showed gender agreement, and 12% did not.

The L1 Spanish speakers produced 28 DPs that had a gendered determiner and a noun, of which 71.5% had masculine nouns and 28.5% had feminine nouns. A total of 96.4% of the DPs in their data showed agreement.

Example (9)a illustrates a case in which the determiner and the noun agree, while (9)b illustrates a case in which they did not agree in gender:

(9) a. Le seguía a la gente atrás
   “(He) followed behind the person.”
   b. Ese tortuga
   “That turtle.”

Furthermore, 84% of the DPs exhibited determiner–noun target number agreement, and 16% did not.

Figure 1 presents the distribution of clitics and null pronouns by L1 background (Shipibo-Konibo or Spanish: SK and SP, respectively, in Figure 1). For the L1 Shipibo–L2 Spanish group, the distribution is as follows: Le represents 80.5% of cases, lo represents 10%, null objects represent 7%, la represents 1.5%, and se represents 0.7%. For the L1 Spanish-L2 Shipibo speakers, the distribution is as follows: le represents 78.5% of cases, lo represents 13%, null objects represent 5.7%, la represents 1.4%, and se represents 1.4%. It is worth noting that, out of all the transitive verbs that were coded, the L1 Shipibo speakers had more overt DPs without clitics (41%) than the L1 Spanish group (12.5%), as is shown in the following example:

(10) Esa tortuga está queriendo morder a un sapito
   “That turtle is about to bite a little toad.”
Among the L1 Shipibo group, 80% of the antecedents/doubled DPs that co-occur with le are masculine, and 20% are feminine. Out of all the DPs with a feminine noun, 82% co-occur with le. A similar pattern can be found among the L1 Spanish group. A total of 77.5% of the antecedents/doubled DPs that co-occur with le are masculine, and 22.5% are feminine. All of the DPs with a feminine noun co-occur with le.

We ran a multinomial logistic regression (multinom, from the R package, nnet) with the clitic type as the outcome variable (le, la, lo, se) and the DP gender (masculine or feminine) as the independent variable, but the model was not statistically significant for any of the clitic types. This suggests that the gender of the doubled DP does not affect the choice of the clitic, although the number of data points is not sufficient to draw firm conclusions.

In order to further probe the extent to which le is an invariable form, we looked at the number agreement in the clitics that were produced by the L1 Shipibo–L2 Spanish group. Out of the 128 le(s) clitics in this group, only 4 were plural. Out of the 189 antecedents or doubled DPs, 178 (94%) were singular, and 11 (6%) were plural. The four les co-occur with a plural doubled DP or have a plural antecedent.
In conclusion, the D–N in DPs that was used by the L1 Shipibo speakers showed an overwhelming tendency to agree both in gender and number, whereas overt clitics tend to be overwhelmingly le and co-occur with masculine and feminine doubled DPs, or they have both types of antecedents.

In terms of the individual results, we did not find particular patterns of clitic distribution, D–N agreement, or clitic and antecedent or doubled /dislocated DP agreement that were related to the range of the age of the acquisition of Spanish among the L1 Shipibo speakers.

6. Discussion

Our results suggest that there is some support for the hypothesis that the L1 Shipibo–L2 Spanish speakers exhibit local DP agreement: 88% of the object DPs show gender agreement, despite the lack of determiners and gender encoding in the determiners and nouns in Shipibo. This suggests that nouns in Shipibo-Spanish are assigned to one of two possible gender classes: masculine or feminine (however, see Harris 1991 for an alternative), which value the determiner for gender through agreement with the determiner, as in (14).

(14) La cesta [G__] basket [GFem] “The basket.”

The percentage of agreeing DPs in this production study was comparable to what was found in an experimental picture-selection task in Sánchez et al. (Forthcoming), which was over 90%. The slight decrease reflects that Sánchez et al. (Forthcoming) used an isolated picture-selection task with lower processing costs. Another possible account would be the lower levels of activation of those nouns that did not trigger agreement. Since we did not control for the lexical frequencies of the nouns in this study, this possibility remains the subject of further exploration.

Our second hypothesis addressed whether the lack of agreement between the clitic and its antecedent or doubled DP that was observed in previous work is due to a lack of gender or a weakened gender agreement paradigm. Specifically, we suggested that Shipibo-Spanish clitics do not encode gender. The results from this study suggest that Shipibo-Spanish clitics are systematically not marked for gender, as is indicated by the use of the -extended use of le for the masculine and feminine antecedents and doubled DPs. The lack of gender marking in clitics is consistent with the line of analysis in which the clitic does not behave as a D, but rather as an invariable argument marker on the verb. Since speakers have determiners that mark for gender and that show agreement with nouns, suggesting that clitics are Ds without gender would entail two types of determiners: those that encode gender and those that do not. Further research is needed to determine whether this lack of agreement in the clitic extends to number agreement.

Despite the low numbers of lo, la, and se, their occurrences in the oral production data of both the L1 and L2 Spanish speakers remains an object of further study as well. Given the low numbers, we could not identify any specific semantic characteristic, such as animacy or the thematic role that conditions their production. However, we were able to determine that, among the 17 L2 Spanish and the 5 L1 Spanish speakers, le was more frequent than lo, la, and se. We acknowledge, as a limitation of this study, that because of the very low numbers of pronominal forms other than le, as well as the low numbers of L1 Spanish participants, it was not possible to carry out inferential statistical analyses that would compare the results within and across groups for gender and number.

Despite their very low numbers, from an acquisitional point of view, the presence of la and lo among the L1 Shipibo–L2 Spanish participants could be interpreted as the result of the speakers being exposed to these forms when interacting with speakers of other varieties of Spanish but lacking the corresponding gender features that are assigned to them in the other varieties. Among the L1 Spanish participants, they could indeed be part of their variety of Spanish. However, le also appears more frequently than these forms in their data,
which indicates the influence from the bilingual Shipibo-Spanish that surrounds them in the contact situation. Furthermore, although less frequent, null pronouns are also found in their data. The overextension of le that is found in Shipibo Spanish is consistent with its distribution in Basque Spanish, which is another variety of Spanish that is in contact with an ergative language that lacks gender and has null objects (Franco 1993), and with Spanish in contact with a nominative–accusative language that lacks gender, such as Quechua (Mayer and Sánchez 2016). The lack of gender marking in the clitic is consistent with an analysis in which the clitic is not a determiner but is, rather, an invariable argument agreement marker, as is proposed for the Basque Spanish animate, le, by Ormazabal and Romero (2013). It is also consistent with the idea that, while gender features can be acquired, as is shown by the high percentages of local gender agreement within the DPs in our data, agreement between a clitic and its antecedent/doubled DP is more difficult to acquire. One possible explanation for this differential treatment of gender in clitics and determiners could lie in the greater processing difficulties that are inherent to long-distance agreement, which is a matter that would require further exploration.

In combination with the receptive data that are reported in Sánchez et al. (Forthcoming), the current findings point in the direction of clitics not behaving as determiners in receptive or production tasks in the variety of Shipibo-Spanish that is represented by the participants in this study. Furthermore, as mentioned above, it is quite possible that, in the contact situation, clitics may become argument markers on the verb (Harris 1996), or even secondary topic markers (Aissen 2003; Bossson 2011; Dalrymple and Nikolaeva 2011; Mayer 2008), which is a fact that would account for their mostly invariable nature.

With regard to gender as a source of the divergence between bilingual and monolingual speakers, the results of our study seem to indicate that, in a language contact situation, such as the one that characterizes the interactions of our participants, gender agreement between determiners and nouns becomes a stable part of the bilingual representation, which shows that gender agreement among bilinguals is sensitive to locality. These findings support a view of contact-induced change that embraces a dynamic perspective (Greenhill et al. 2017; Hickey 2010; Matras 2012) and suggest that gender features may be activated differently, depending on the domain in which they appear (DP vs. TP, for example), which can result in local agreement (within a local domain) or long-distance agreement (outside of a local domain).

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Notes

1 List of abbreviations: 1P = first person; 2P = second person; 3P = third person; ant = antecedent; ABS = absolutive; CAUS = causative; CD = clitic doubling; CL = clitic; CLLD = clitic left dislocation; CLRD = clitic right dislocation; DEM = demonstrative; D = determiner; DP = determiner phrase; DOM = different object marking; ERG = ergative; EVD = evidential; FEM = feminine; IPFV = imperfective; INT = intensifier; MASC = masculine; N = noun; NP = noun phrase; PFV = perfective; PL = plural; SG = singular; SK = Shipibo-Konibo; SP = Spanish; VP = verb phrase.

2 We thank an anonymous reviewer for pointing this out.

3 Amazonian Spanish refers to a variety of Spanish that has been spoken in the Amazon basin since the arrival of the Spaniards and the spread of their language in the colonized territories. Unlike Andean Spanish, which is in contact mostly with languages of the Quechua and Aymara families, Amazonian Spanish is in contact with one or more of the 300 indigenous languages in the Amazon region that differ typologically from Quechua and Aymara. Amazonian Spanish has received little attention compared to Andean Spanish. For a more detailed explanation of Amazonian Spanish grammar, please see Vallejos (2014).

4 Sánchez et al. (Forthcoming) reported data for 24 participants. However, here, we report data for only 22, as 2 participants in Sánchez et al. (Forthcoming) did not complete the frog story task.

5 One of the L1 Spanish speakers is in contact with Shipibo as it is spoken by their children and grandchildren in their home, but the speaker did not state a range of the age of acquisition for the language.

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