# A formal analysis of lip-pointing in Latin-American Spanish\*

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#### **Abstract**

This research focuses on the understudied interface between syntax and gesture within the emerging field of the dialectal syntax of Spanish. In particular, a formal analysis of so-called lip-pointing in various Latin-American varieties of Spanish is developed. Evidence is provided for the availability of deictic adverbs realized as pointing gestures and, most importantly, gestural or visual pronominals, that is to say, gestures which function as pronominals. The discussion provides evidence for Jouitteau's (2004, 2007) multi-channeled syntax hypothesis, which states that even in oral languages the realization of syntax may include grammaticized gestures (see also Floyd's 2016 modally hybrid grammar).

**Keywords:** gesture-syntax interface; dialectal variation; deixis; Latin-American Spanish.

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#### 1. Introduction

Traditionally, the relationship between syntax and gesture in Spanish has received little attention. The emerging field of the dialectal syntax of Spanish is no exception in this regard. The present research aims at addressing this gap in our knowledge through the analysis of deictic gestures in various Latin-American varieties of Spanish with an emphasis on so-called lip-pointing. Evidence is provided for the availability of deictic adverbs realized as pointing gestures and, most importantly, what I refer to as gestural or visual demonstrative pronouns. Support for the latter view is provided by (i) the way the presence of pointing gestures or lack thereof has an effect on the grammaticality of the sentence; (ii) the fact that the distribution, licensing and interpretation of pointing gestures is restricted by well-established syntactic principles (e.g., Case Theory or Binding Theory). Furthermore, the similarities and differences between gestural and oral pronouns are explored, as well as the differences between the Latin-American Spanish facts and closely-related phenomena in Atlantic French (see Jouitteau 2004, 2007). The discussion provides evidence for Jouitteau's (2004, 2007) multichanneled syntax hypothesis, which claims that even in oral languages syntactic categories, projections, etc., such as expletives or Q particles relevant to clause typing, might be realized by gestures. For an overview of the debate on multichannality and relevant data, e.g., celestial pointing for time-of-day reference in Nheengatú, see Floyd (2016)'s modally hybrid grammar and references therein.

This article is structured as follows: Section 2 presents a basic overview of deictic gestures in Spanish, including but not restricted to lip-pointing. Section 3 develops a formal analysis of lip-pointing with a nominal function in Latin-American Spanish arguing for its conventionalized or grammaticized nature. In particular, evidence for the availability of gestural or visual demonstrative pronouns in this variety is provided. Further nuances concerning lip-pointing are also discussed in this section, e.g., the differences between visual and oral pronouns. Section 4 compares Spanish labial pronouns to French gestural expletives (Jouitteau 2004, 2007) and section 5 goes beyond the present formal analysis outlining a research agenda on understudied issues concerning deictic gestures in Latin-American Spanish.

# 2. An overview on the uses of lip-pointing in Latin-American Spanish

Hand-pointing (☞) with a deictic function is most likely than not present in every single variety of Spanish. Still another form of pointing, namely, lip-pointing (๑), which on top of the movement of the lips includes slight head movements and eyebrow raising, is attested in certain Latin-American varieties (e.g., Chile, Colombia, Guatemala or Honduras). Lip-pointing in these varieties may arguably

<sup>1</sup> See Saitz and Cervenka (1972) for Colombian Spanish. For the purposes of this research, judgments were tested for Colombian and Chilean Spanish. For discussion of the cross-linguistic distribution of lip-pointing, see Enfield (2001). In particular, Enfield notes that beyond the presence/absence of lip-pointing across languages (e.g., lip-pointing is present in certain Australian, African and Native American languages), there might also be slight variations in the gesture itself. For instance, the lower lip or else the upper

fulfill three different functions: (i) it might be used as a fragmentary utterance to make requests by merely pointing at the object involved in the event supposed to take place or else at the individual whose behavior is to be influenced; (ii) it might function as an adverb; (iii) it might function as a gestural pronominal. This paper will focus on developing a formal analysis of the latter use.

With regard to (i), the following uses might be attested in a family dinner: The mother may point at, say, the butter to request that somebody hand it her. Alternatively, the mother may point at her daughter to ask her to finish her meal or to eat faster. It is word noting that regular nominal expression may fulfill this very function, e.g., one can ask for the butter by merely mentioning it or give an order to somebody by using his/her name. It is unclear to what extend such requests include syntactic structure, understood as ellipsis with full-fledged syntax at the ellipsis site (see Hankamer and Sag's 1976 Deep vs. Surface Anaphora distinction concerning pragmatic control/non-linguistic antecedents; see Depiante 2000 and Saab 2008 for recent discussion on Spanish). Thus, this use will be left aside.

As far as (ii) is concerned, the use of lip-pointing (and hand-pointing) as a deictic adverb is illustrated (1):

(1) Context: A driver asks a traffic officer for directions.

> Driver: ¿Dónde está la plaza Victoria?

where is the square Victoria 'Where is Victoria Square?'

Traffic officer: ræ/ ◆ / Allí / \*Ø.

there 'It is there.'

This interaction was witnessed by the author in Chile. Lip-pointing was used in this variety – the traffic officer had his hands in his pockets throughout the interaction and did not utter a single word. Under theories where Fragment Answers as the one in (1) are the result of ellipsis with full-fledged syntax at the ellipsis site (e.g., see Merchant 2004, a.o.), this kind of data would make for a non-trivial case study of the gesture-syntax interface in that the syntactic element allegedly realized as a gesture would be part of a full-sentence.<sup>3</sup> Be that as it may, the emphasis of this paper will be put on the third use of lip-pointing in Latin-American Spanish, that is

lip may protrude and the lips might be open or closed when making the gesture. The pragmatic properties of lip-pointing across languages or dialects may vary as well.

Enfield (2001: 185) stresses the relevance of gaze in lip-pointing by claiming the following based on his analysis of this phenomenon in Laos: "the 'vector' of lip-pointing is in fact defined by gaze, and (...) the lip-pointing action itself (like other kinds of 'pointing' involving the head area) is a 'gaze-switch', i.e. it indicates that the speaker is now pointing out something with his or her gaze." As far as I can see, this analysis is accurate for Latin-American Spanish as well.

<sup>&</sup>lt;sup>3</sup> Theories of ellipsis which argue against the existence of full-fledged syntax at the ellipsis site (e.g., see Culicover and Jackendoff 2005 for recent discussion) still need to be able to generate the ellipsis remnant, just not as a part of a full sentence. In that sense, any fragmentary utterance is part of the syntactic component/generative procedure even under those theories.

to say, lip-pointing with a nominal function. Unambiguous evidence for the grammaticized nature of this gesture and its contribution to the morphosyntax of the relevant varieties will be provided in the next section.

With regard to the pragmatic contexts that license lip-pointing, these gestures are particularly favored in informal interactions within closed social circles, sometimes attempting to hide the intended reference from others who are present but are not part of the conversation. This being said, these gestures are attested, nonetheless, when a number of these factors are absent, e.g., in the dialogue in (1).

# 3. Evidence for the availability of gestural pronouns in Latin-American Spanish

While both hand-pointing and lip-pointing may function as a deictic adverb (see section 2), the goal of this section is to provide evidence for the availability of gestural pronouns in Latin-American Spanish. Specifically, section 3.1 argues that these productive gestures have nominal features in that they interact meaningfully with well-established syntactic principles and generalizations. Section 3.2 investigates the syntactic category of lip-pointing in this use arguing that nominal lip-pointing functions as a demonstrative pronoun. Section 3.3 develops further arguments that these gestures are part of the morphosyntax of the relevant varieties by presenting additional productive uses of lip-pointing. Section 3.4 provides an analysis of multi-modal doubling, that is to say, cases where lip-pointing doubles an oral DP. Section 3.5, in turn, furthers our understanding of the properties of gestural pronouns by studying the differences found between labial and oral pronouns, e.g., the incompatibility of labial pronouns with arbitrary interpretations as opposed to oral pronouns.

# 3.1. Evidence for the nominal use of labial gestures

While (1) shows that labial gestures may function as adverbials, nominal uses of lip-pointing (and even hand-pointing) are attested as well:

(2) A: ¿Quién va a venir? who will to come 'Who will come?'

B: *Gestural component:* 

him/her/them 'Him/her/Them.'

As seen in the glosses, • can be used *in the place of a pronominal*. Furthermore, this labial gesture is compatible with both singular and plural reference (see (2B)) and there is no animacy restriction in contrast to oral personal pronouns. 5 Unfortunately, this dialogue is not particularly informative regarding the multichannality of syntax, as the exact treatment of ellipsis structures is subject to debate in the literature (see section 2 and fn. 3 for brief discussion).

<sup>4</sup> M. Hurtado and J. Guzmán-Valencia (p.c.) note that lip-pointing might only be widespread among the older generations in contrast to the younger generations in Colombia. I leave this issue for future research, just noting that a change might be in progress.

<sup>&</sup>lt;sup>5</sup> By default [+human] → is glossed as 'he/she/they' (according to its Case properties), unless the context determines its reference.

More straightforward evidence is provided by the fact that lip-pointing can appear as the object of a preposition in a full sentence (note that under the intended interpretation of the former example the oral and the gestural pronouns are alternatives to one another as opposed to them co-occurring in the sentence; for discussion of that kind of doubling, see section 3.4):

(3) Context: Mom has bought presents for her two toddlers and she is talking to her husband about the gifts. Their daughter ( • d) and their son ( • d) are sitting far away from one another talking to other family members at the other end of the room. Mom and dad want to keep their discussion private. Mom: Esto se lo he comprado a  $\{ \bullet_s / \text{\'el}_s / \text{\'el}_s / \text{\'el}_s \}$ .

this CL have bought for him 'As to this, I bought it for him.'

The grammaticized morphosyntactic role of • can be seen in the fact that its presence renders the sentence grammatical in the absence of any overt prepositional object; the preposition does not allow for a null object and thanks to • this constraint is respected.

One prediction of the analysis of • as a nominal is that it should be subject to Binding Theory. For instance, it should be able to bind an anaphor (see Chomsky's 1981 classic work). The prediction is fulfilled:

- **(4)** Ayer a • i un retrato de sí mismoi. a. yesterday CL gave.1SG to him a portrait of himself 'Yesterday, I gave him a portrait of himself.'
  - a la madre de 🗢 i un retrato de sí mismoi. \*Aver le di b. yesterday CL gave.1SG to the mother of him a portrait of himself "Yesterday, I gave his mother a portrait of himself."

Here, • refers to a male individual. When • c-commands the anaphor, the latter is licensed, (4a). In contrast, • does not c-command the anaphor in (4b); only la madre does but the gender mismatch prevents the anaphor from being licensed, hence the ungrammaticality of this example. Furthermore, the example in (4a) is relevant as well in that it shows that • may appear in contexts where it is not focalized – just like a regular element fulfilling a nominal function.

Under the well-established assumption that only identical categories may be coordinated, coordination provides still another argument regarding the nominal nature of •:

- (5) Pedro y no quieren trabajar duro. a. Pedro and him/her/them not want.3PL to-work hard 'Pedro and him/her/them do not want to work hard.'
  - b. a hablar con Pedro y con . will.1SG to talk with Pedro and with him/her/them 'I will talk to Pedro and him/her/them'

Note that in the intended interpretation *Pedro* does not corefer with **◆**; otherwise, ungrammaticality would arise as expected within Binding Theory (Principle B):

(6) Pedro<sub>i</sub> y  $\{\acute{e}l_{j/*i} / \bullet_{j/*i}\}$  no quieren trabajar duro. Pedro and him/her not want.3PL to-work hard 'Pedro and him/her do not want to work hard.'

Thus, • not only can act as a binder, but rather its distribution is subject to Binding Theory, too.

Additionally, the examples in (5)-(6) are relevant as well in that they provide still another piece of evidence that  $\bullet$  may appear in contexts where it is not focalized. Last but not least, coordination structures impose an overtness requirement on the conjuncts.  $\bullet$  meets this requirement and, therefore, its presence is crucial for the grammaticality of these structures.

In a similar vein, given the hypothesized nominal nature of **⇒**, it is predicted that it would need Case (see Chomsky's 1981 Case Filter, a.o.). The prediction is fulfilled as seen in the obligatory presence of the preposition in (7):

- - b. El regalo es \*(para) ◆. the gift is for him/her/them 'The gift is for him/her/them.'

Thus, Case Theory provides still another argument for the nominal use of ◆.6

<sup>6</sup> In ellipsis contexts, nonetheless, the Case-licensing preposition might be missing from the gestural remnant:

a. A: ¿Por quién fue visto Pedro?

by whom was seen Pedro

'By whom was Pedro seen?'

B: (Por) **◆**.

by him/her/them

'By him/her/them.'

b. A: ¿Para quién es el regalo?

for whom is the gift

'For whom is this gift?'

B: (Para) ◆.

for him/her/them

'For him/her/them.'

A priori, this is not unexpected since this phenomenon is independently available for oral remnants (see Sáez 2006, Almeida and Yoshida 2007, Rodrigues et al. 2008, and Vicente 2008, a.o., for relevant discussion on P-drop and its potential relation to the presence of an underlying cleft at the ellipsis site). This is illustrated for Sluicing, (ii), and for Stripping, (iii):

ii. Tengo un regalo para alguna de estas personas, pero no sé have.1SG a gift for some of these persons but not know.1SG (para) quién exactamente. for whom exactly

To sum up, it has been argued that • is part of the morphosyntax of Latin-American Spanish. Evidence is provided by the fact that (i.) • can replace nominal expression; (ii.) • has an effect on grammaticality of the sentence, e.g., it fulfills various overtness and/or subcategorization requirements imposed by prepositions and coordination structures; (iii.) • is active for the purposes of Binding Theory and needs to be licensed just like a regular (oral) pronominal – it needs to receive Case; and (iv.) • is not restricted to contexts where it is focused, that is to say, it is compatible with other information structural properties, again, just like a regular pronominal.

3.2. On the syntactic category of **◆** in its nominal use

Inasmuch as can substitute for nominal expressions, it seems logical to conclude that it functions as a pronoun. Furthermore, given that it incorporates (proximal) spatial deixis, one can argue that • is a demonstrative pronoun not unlike *este* 'this (one)' and ese 'that (one)', (8a). The question suggests itself whether • may also function as a demonstrative determiner, just like este and ese. (8b) tests this option:

(8) {Ese / **◆**} me dijo a. que ... that him/her me told.1SG that 'That one/ That individual told me that...' b. {Ese hombre/ \*ese ◆} me dijo this him me told.1SG that that man

'That man told me that...'

(8b) provides evidence that • overlaps with demonstratives as *este* and ese only partially as the latter may function both as a demonstrative pronoun and

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'I have a gift for one of these people, but I don't know exactly for whom.'
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iii. comprado un regalo para María, no (para) Juan.

have.1SG bought a gift for María not for Juan

'I have bought a gift for María, not for Juan.'

Still, oral remnants in Fragment Answers seems to be particularly resistant to P-drop in Spanish (cf. (i.) and (iv.)), a fact that calls for an explanation as it casts a doubt on the analysis of P-less lip-pointing remnants as involving full-fledged syntax at the ellipsis site (see section 2 and fn. 3 for relevant discussion):

iv. a. A: ¿Por quién fue visto Pedro? by whom was seen Pedro

'By whom was seen Pedro?'

\*(Por) María. B: by María

'By María.'

¿Para quién es el regalo? b. A:

for whom is the gift 'For whom is this gift?'

B: \*(Para) María. María for

'For María.'

The observations in this footnote do not contradict the arguments being made in the main text, rather they reveal that • may have different statuses or uses in the grammar of Latin-American Spanish.

as a demonstrative determiner, in contrast to • which may only be used as a demonstrative pronoun.

With regard to the syntactic category (DP/NP) of the visual pronouns, • is expected to be a DP. This can be tested, too. Spanish shows a full DP vs. bare NP asymmetry in that the distribution of the latter is limited, e.g., bare NPs cannot appear as the subject of a transitive verb (Casielles-Suárez 2004), as illustrated in (9). If indeed • is a DP, the prediction is that it should pattern with oral demonstratives in that it should not be subject to this constraint. The prediction is fulfilled:

(9) { ► / Esos / \*Niños} me han comprado un regalo. they / those / children me have.3PL bought a gift 'They/The children have bought me a gift.'

In a similar vein, the fact that  $\bullet$  can be coordinated with a DP, provides further evidence for the DP status of  $\bullet$  itself (see also (5)-(6); the use of a proper name complicates the interpretation of the test, depending on how proper names are to be treated, e.g., as DPs headed by a null determiner; see Ghomeshi and Massam 2009 and references therein for discussion of the treatment of proper names):

(10) El guardia y • ... the warden and him/her/them... 'The warden and him/her/them...'

To sum up the discussion so far, evidence has been provided for the following two closely-related claims: (i.) in its nominal function, • is a demonstrative pronoun, as opposed to a demonstrative adjective; (ii.) the syntactic category of • when functioning as a nominal is 'DP' as opposed to 'NP'.

Next, the argument that these pronominals realized as gestures are part of the syntax of Spanish in the relevant dialects is strengthened, e.g., by addressing some apparent counterexamples.

- 3.3. Further evidence for the grammatization of labial gestures as pronouns This section provides further support for the view that  $\bullet$  can play non-trivial syntactic roles. Specifically, it is shown that  $\bullet$  can be associated with focalizing particles as solo 'only' and appear as an ellipsis remnant associated with no 'not', (11a) and (11b), respectively:
- (11) a. Solo {él/◆} tiene un coche. only he has a car 'Only he has a car.'
  - b. Va a venir Juan, no {él/◆}. will.3SG to come Juan, not him 'Juan will come, not him.'

Again, *pro* cannot appear in this context as it cannot be focalized in Spanish.

# 3.4. Visual pronouns and multi-modal syntactic doubling

The option of pointing with the lips while spelling an overt oral pronoun exists. This is illustrated in (12):

- (12)¿Quién va a venir? A: who will to come
  - Gestural component: B:

*Oral component (simultaneously):* Ese hombre / Ese. that man / that 'That man / That one.'

This is not unexpected, as doubling within the Spanish DP is independently attested in the case of so-called floating NPs (e.g., Torrego 1996), (13), and determiner doubles, (14):

- (13)Nosotros los lingüistas.... the linguists 'We linguists...'
- (14)el tipo aquel the dude THAT 'That guy'

Traditionally, such cases have been analyzed as complex DPs.<sup>7</sup> This analysis can be straightforwardly extended to (12); the fact that oral and labial pronouns belong to different channels (the oral and the gestural channel, respectively) arguably allows for a certain degree of simultaneity or superimposition of the gesture and the oral DP in contrast to the purely oral doubling found in (13)-(14). In the latter examples, the structure is mapped onto linear precedence along the lines of the Linear Correspondence Axiom (LCA; Kayne 1994). In contrast, the relevance of linear precedence is less important for multi-modal doubling (see Jouitteau 2007: 13 for similar conclusions regarding data with a multichannel dimension and the corresponding 'multilinearization). If

¿Dónde pusiste i. el pasaporte? where put.2SG the passport

'Where did you put the passport?'

B: Allí, en la mesa. there on the table

'Right there, on the table.'

Context: A driver asks a traffic officer for directions. ii.

¿Dónde está la plaza Victoria? Driver:

where is the square Victoria 'Where is Victoria Square?'

Traffic officer: Gestural component:

Oral component (simultaneously):

Allí. there 'There.'

Doubling is also attested in the case of adverbs. (i.) illustrates doubling in the oral channel, whereas (ii.) illustrates multi-modal doubling:

correct, this suggests that under certain circumstances, the requirements imposed by the LCA on the linearization/externalization procedure might be relaxed (see Ortega-Santos 2016 for relevant discussion from ellipsis contexts). I leave this issue for future research noting its potential interest.

Still, this topic merits further research. Multi-modal doubling with second person referents helps illustrate the complexity of the issue. Marcela Hurtado (p.c.) notes that  $\bullet$  is used for third person referents, in which case it might be doubled or not, as we have seen. In contrast, for  $\bullet$  to be compatible with a second person referent, it *has* to be doubled, meaning the presence of the oral pronoun is obligatory:<sup>8</sup>

- (15) A: ¿Quién va a ir de compras? who is to go of shopping 'Who is going to go shopping?'
  - B: Gestural component: ( )

    Oral component (simultaneously): \*(Tú) vas a ir de compras.

    you.SG will.2SG to go of shopping
    'You will go shopping.'

In other words, the presence of → with a second person referent is optional, even when focused, (15B). The same observation applies to (12) – the use of lip-pointing or lack thereof does not affect the grammaticality of the construction. Such cases of multi-modal doubling could be analyzed as a complex DP along the lines suggested before, in which case they would be relevant to the study of the LCA. Alternatively, it could be that the gesture is merely helping identify the referent of the oral XP and that the gesture in that specific context is 'non-linguistic' or sentence-external. Be that as it may, this contrast in the distribution of → depending on doubling and the referent (2<sup>nd</sup> person vs 3<sup>rd</sup> person) underscores the heterogeneity of lip-pointing (and its rule-based nature), beyond the basic uses illustrated in section 2. Crucially, by extension, (15) provides still another argument for the singularity of → used as third person demonstrative pronoun and, thus, for its grammatization that enables it to appear on its own in the absence of (overt) syntactic doubling.

<sup>&</sup>lt;sup>8</sup> First person reference is not possible with •. While it is possible to point at oneself with a hand gesture, it is not clear whether the intended interpretation would readily available in the case of lip-pointing due to physical limitations.

In principle, an analysis in which • is doubled by pro when • is the only overt pronominal fulfilling a certain syntactic function cannot be totally ruled out - such proposals exist even for overt subjects with no overt doubling, e.g., see Gallego (2007). This does not weaken the argument being made, though, which is that labial pronouns fulfill a syntactic function in Latin-American Spanish as seen in (i.) the way the presence of • or lack thereof has an effect on the grammaticality of the sentence; (ii.) the fact that the distribution of • is restricted by well-established syntactic principles (e.g., Case Theory or Binding Theory). Note that there is an ongoing debate on whether pro is present in the grammar or whether it is derived, say, by a deletion process targeting a nominal expression (see Saab 2008, Holmberg 2010, Duguine 2014 and Sheehan to appear, a.o.). Could • be derived in some sense as well? For current purposes, it suffices to claim that a certain lexical item, a demonstrative pronoun, is selected from the lexicon to enter the derivation and that this lexical item ends up being 'pronounced' as a lip-

### 3.5. A comparison between gestural pronouns and oral pronouns

After providing evidence for the syntactic role of certain uses of lip-pointing, this section analyzes other features of these deictic elements, with an emphasis on the contrasts between gestural and oral pronouns.

As far as the contrast between oral and gestural pronouns is concerned, it is worth noting that the form of labial pro-forms is not completely arbitrary in contrast to the PF of oral pronouns. Specifically, the directionality of labial gestures is motivated by the need to identify the referent and, as such, the relation between the reference and the form can be argued to be at least partially motivated. Note that the expression 'partially motivated' is used because pointing is a culturally specific phenomenon (see Wilkins 2003 for an overview). In this regard, gestural pro-forms are similar to onomatopoeias and (possibly) kin terms across languages (see Jonsson 2001 for the latter). Inasmuch as the phonetic form of both onomatopoeias and, again, possibly kin terms are partially motivated and yet culturally specific, they are subject to crosslinguistic and even cross-dialectal variation.

Second, oral pronouns include gender and number morphology, in contrast to visual pronouns. In that sense, the visual pronouns themselves are somewhat less complex than oral pronouns, but the syntactic component does not make any difference in the way it manipulates oral vs. visual pronouns. This is expected, since syntax is supposed to be blind to PF properties within the standard T-model (for discussion of alternatives to the T-model with an emphasis on Romance see Zubizarreta 1998 and Kahnemuyipour 2009, a.o.).

Third, labial pronouns, in contrast to oral pronouns, are incompatible with arbitrary interpretations, (16), allegedly due to their inherent deictic component as well as the partially motivated form discussed in the previous paragraph (note that plural agreement on the verb is relevant to license proarb and, thus, to create minimal pairs in (16); this does not interfere with the judgments regarding  $\bullet_{arb}$ , since, as stated, labial pronouns are compatible both with singular and plural verbs (see (2B); for a recent overview of the properties of arbitrary pronouns in Spanish, see Devís Márquez 2003):

- (16)→ / \* → arb llaman a. a la puerta. knock.3PL at the door 'They are knocking at the door.' pro<sub>arb</sub> llaman a la puerta. b.
  - knock.3PL at the door 'Somebody is knocking at the door.'

To sum up, three contrasts between gestural pronouns and oral pronouns have been discussed, namely, the partially motivated form of the former, their lack of plural and number morphology, which is of no consequence for the way syntax manipulates them, and the incompatibility of arbitrary interpretations with gestural pronouns.

### 4. A comparison between French gestural expletives and Spanish labial pronouns

Atlantic French is particularly relevant in the present context as a formal analysis of closely-related data has been developed by Jouitteau (2004, 2007). In this variety, the preverbal position can be filled by a lexical DP, a gesture (∜) or a sound (♠). Not unlike Latin-American Spanish, the gesture may involve the lips (my emphasis):

The preverbal sound can be an intake of breath or minimal vocalic production. The preverbal gesture consists of facial expressions or movements (nod, head dip, head- shake, *various movements of the lips*, furrowed or raised eyebrow...) or movements of hands and body parts (shrug, hands opened, movement of one hand up or down, head scratch, slap of the knee, slap of the hand, shake of finger, snap of fingers). [from Jouitteau 2004: 101]

While the Atlantic French data seem to be closely-related to their Spanish counterpart, the French gestures are best described as subject expletives due to the fact that they are restricted to subject position and that their omission yields an ungrammatical result without the subject being focalized. This leads Jouitteau to claim that the relevant gesture in Atlantic French is an expletive head merged into C to satisfy the PF side of the EPP (see Holmberg 2000, a.o.), a constraint that is known to be active for independent reasons in this non-pro-drop variety:

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(17) Context: 'Il est encore pas là aujourd'hui...

He is again not here today.'

{DP<sub>subject</sub> /♥/♠/*∅} viendra demain, tu verras...

will-come tomorrow, you will.see
'He'll come tomorrow, you'll see.'
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In contrast, while Spanish may have EPP effects (see Ortega-Santos 2016 for a recent overview of the debate), clearly there is no overtness requirement in this language – it is a pro-drop language. In those contexts where the presence of the labial pronoun is obligatory, the obligatoriness is unrelated to the EPP requirement, but rather information structure forces its presence, e.g., when focused (see (2), repeated here for the sake of exposition; see also (3) and (5), where ➡ is not focused but rather its presence is forced by overtness requirements imposed on the object a preposition and the conjuncts in coordination structures, respectively):

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(18) A: ¿Quién va a venir? who will to come
B: ◆/Ese/*Ø/*pro
that one
'That one.'
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Thus, to a certain degree the specific instantiation of the EPP in Atlantic French as opposed to Latin American Spanish appears to be responsible for the contrast between these two varieties. Furthermore, the distribution of gestural pronouns is freer in the latter language; after all, they are pronouns, not subject

expletives, which means that they are not restricted to the preverbal position of the sentence and may appear, for instance, as the object of a preposition, e.g., (7).

Further evidence for the contrast between lip-pointing in Latin-American Spanish and gestural expletives in Atlantic French comes from the fact that the gesture in the former varieties can appear in embedded contexts in contrast to the French expletives (see Jouitteau 2004 for discussion of the French facts). This is expected given that the labial pronouns in Spanish behave as regular demonstrative pronominals. This contrast is illustrated in (19) and (20) for the French and Spanish data, respectively:

- que <sup>®</sup>/**№** prend l' avion. (19)\*Pouchka dit partout says everywhere that take the plane 'Pouchka says everywhere that s/he takes the plane.'
- (20)Context: A and B talk about what Pedro said concerning two other people,  $\bullet_1$  and  $\bullet_2$ , who are present. They don't want either  $\bullet_1$  or  $\bullet_2$  to overhear the conversation. Speaker A says... Pedro ha dicho que ◆₁ va a limpiar la casa. Pedro has said that he/she will to clean the house 'Pedro has said that he/she will clean the house.'

Again, this contrast provides evidence for the differences between Spanish and French. 10

Jouitteau (2007) discusses still another use of gestures in Atlantic French, namely, for clause typing purposes, e.g., to mark a clause as a question - a use unattested in Latin-American Spanish. In more technical terms, Jouitteau's data provide evidence for the use of gestures as C/Q heads. The present research is relevant in this context in that it expands the inventory of syntactic categories realized as gestures (I thank an anonymous reviewer for bringing this issue to my attention).

#### 5. Future research

As mentioned briefly in the discussion, various issues are left for future research: First, it remains to be determined whether there is sociolinguistic variation in the use of labial pro-forms. While it has been suggested that the age variable might be particularly relevant (see fn. 4), other variables are worth considering (register, etc.; see section 1). Furthermore, it remains to be determined whether labial pro-forms correspond to a separate entry in the lexicon – and it just happens to be the case that this entry is realized as a gesture - or whether they share the same entry with other demonstrative pronouns (see fn. 9). Still another aspect of interest for syntactic theorizing is to what extent the use of two different channels in the externalization procedure, namely, the gestural and the oral channel, relaxes the constraints imposed otherwise by the LCA on the externalization procedure (see section 3.4).

<sup>&</sup>lt;sup>10</sup> Jouitteau (2007:12) notes that pointing gestures functioning as deictic adverbs 'can be realized with a wide array of face and body gestures (finger, hand, head, eye, etc.) which, however, is not without restrictions (\*lips)', in clear opposition to Latin-American Spanish (my emphasis).

Other relevant issues that go beyond the formal analysis of deictic gestures are as follows: The exact distribution of lip-pointing across countries/dialectal areas in Latin-America remains to be established. Furthermore, given that lip-pointing is also attested in indigenous languages of the Americas (e.g., see Key 1962 for Bolivia, Sherzer 1993 for Panama) as well as in Brazilian Portuguese and certain indigenous languages of Brazil (S. Meira, p.c. in Enfield 2001), the phenomenon lends itself to a study of language contact and of the historical origins of the gesture. In particular, is there a correlation between the presence of labial gestures in indigenous languages and local Spanish varieties? Alternatively, is there a correlation between the features of labial gestures in indigenous languages and lippointing in the local varieties of Spanish? For instance, the uses of lip-pointing among the Kuna in Panama go beyond the uses that I could find in Spanish, e.g. the Kuna may use lip-pointing not only to express direction or location but also to greet or to mock somebody (Sherzer 1993). Are those uses available in Panamanian Spanish or beyond? Similarly, the exact gesture used in lip-pointing varies crosslinguistically: the upper or the lower lip might protrude or else the lips might be closed (see Enfield 2001 for relevant discussion; see fn. 2 in this paper). Is there variation across Spanish varieties and/or the indigenous languages in contact with Spanish? Still another topic of potential interest is the relationship between handpointing and lip-pointing in Latin-American Spanish, e.g., to what extent they complement one another and whether one of the forms is specialized for certain contexts (see Wilkins 2003 for a comparison between index-pointing and lippointing in various cultures; see also fn. 8 in this paper). The answers to these questions, which for the most part go beyond the formal analysis of lip-pointing would provide a more complete understanding of this phenomenon.

#### 6. Conclusion

This research has shed a light on the understudied microvariation in the use of gestures in Spanish. It has been shown that on top of hand-pointing, certain Latin-American varieties use lip-pointing and that, most importantly, these gestures are grammaticized as gestural or visual pronominals which are part of the morphosyntax of these dialects. This entails that the syntax of oral languages may make use of more than one externalization channel, in particular, the oral channel and the gestural channel (see Jouitteau 2004, 2007 and Floyd 2016).

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