Comparing ultimate attainment in second and heritage language speakers: syntactic and morphological knowledge of Italian accusative clitics.
Outline

- Background
- The study
- Results
- Discussion and conclusion
The Problem

Despite very early exposure, heritage speakers fail to attain native-like knowledge in certain domains which remain ‘incomplete’ in ways comparable to L2 speakers [Montrul, 2008, 2016]. In heritage Spanish, this is especially true for morphosyntax:

- gender [Montrul, Foote, & Perpiñán, 2008; Polinsky, 2008a, 2008b]
- mood morphology [Montrul & Perpiñán, 2011; Silva-Corvalán 1994, 2014; Potowski et al., 2009]
- differential object marking [Montrul & Bowles, 2009]
L1 vs HL acquisition

Ultimate attainment

L1

- development is complete
- uniform (less individual differences)
- less variability in interpretation and production
L1 vs HL acquisition

Ultimate attainment

- development is incomplete
- individual variability
- variability in interpretation and production

HL

- L1 transfer
- interface vulnerability

[Montrul 2008, 2009, 2016]
If HL speakers are similar to L2 speakers, does age of exposure have an effect on ultimate attainment?

HL speakers receive:
- early exposure
- naturalistic, oral input
- communicate verbally

L2 speakers receive:
- late exposure
- fine-tuned input through instruction
- both oral and written language
- communicate less verbally
Differences between L1 and L2 speakers, however, are presumed to lead to differences in ultimate attainment:


Prediction: HL speakers are expected to develop more native-like competence if the quality of input and age of exposure are similar to L1 speakers.
Studies comparing L1, L2, and HL acquisition

The core studies:
1. Montrul et al. (2008a, 2008b)
2. Polinsky (2008a)
Summary:
Evidence available suggests that AOE leads to more L1-like syntactic than morphological knowledge.

Research should pursue the study of specific grammatical properties in greater depth, analyzing their linguistic complexity and the manner in which they are used within different structures (Montrul, 2010, p.169)
Morphosyntax of Italian clitics

In general, clitics:
- Encode functional categories gender, number, person, case
- Unstressed
- Rigidly ordered clusters
- Have a host
- Verbal

[Spencer and Luís, 2012]
Table 1. *Template of Italian accusative clitics*

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Gender</th>
<th>Masculine</th>
<th>Feminine</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td>mi</td>
<td>mi</td>
</tr>
<tr>
<td>2</td>
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<td>ti</td>
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<td>la</td>
</tr>
<tr>
<td>1</td>
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<td></td>
<td>ci</td>
<td>ci</td>
</tr>
<tr>
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<td>PL</td>
<td></td>
<td>vi</td>
<td>vi</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>li</td>
<td>le</td>
</tr>
</tbody>
</table>
Morphosyntax of Italian clitics

Clitic placement depends on subtle lexico-semantic properties

[Cardinaletti & Schlonsky, 2004]

(6) a. I pesci, Pietro li cucina all’aperto

The fish Pietro them.cl cooks.Vfin in-the-outdoors

“the fish, Pietro cooks them outdoors”

b. I pesci, Pietro (li) vuole cucin-are (-li) all’aperto

The fish, Pietro them.cl want.MOD cook.V-INF in-the-outdoors

“The fish, Pietro wants to cook them outdoors”

e. I pesci, Pietro li fa cucin-are all’aperto dalla nonna

The fish, Pietro them.cl make.CAUS cook.V-INF in-the-outdoors by-the grandma

“The fish, Pietro has them cooked outdoors by grandma”

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Morphosyntax of Italian clitics

Syntactic Complexity [Cardinaletti & Schlonsky, 2004]

Syntactic complexity of accusative clitic structures with lexical, quasi-functional, and functional verbs
Morphosyntax of Italian clitics

Syntactic Complexity [Cardinaletti & Schlonsky, 2004]

- lo voglio (less complex, only lexical)
- lo faccio scrivere dalla nonna (less complex, only lexical)
- lo vuole vedere (more complex, functional)

Prediction: use of clitics with lexical and causative is less complex to process than modal verbs for native speakers.
L2 acquisition of Italian clitics

Santoro (2008)

Participants: L1 English speakers at different levels of L2 proficiency in Italian and natives

Task: Speeded GJT
L2 Italian studies of accusative clitics

Santoro (2008)

Structure: accusative clitics in lexical, quasi-functional (CAUS), and functional (MODAL) contexts in grammatical and ungrammatical conditions:

$\text{cl-Vfin}$ Le partite di calcio, gli italiani $\text{le}$ guardano ogni domenica.

* Angelo è davvero fortunato. La sua ragazza $\text{lo}$ scrive spesso.

$\text{cl-MOD-Vinf}$ Gli amici, Piero $\text{li}$ vuole invitare alla festa di compleannno.

* Marcello incontrerà la sua ragazza perché $\text{la}$ vuole parlare.

$\text{cl-CAUS-Vinf}$ Povero Carlo! Il suo capo $\text{lo}$ fa lavorare molto

* Povera Marla! I genitori $\text{la}$ fanno sempre pulire la stanza.
L2 acquisition of Italian clitics

Santoro (2008)

Results:

- clitic placement is unproblematic
- non-native-like judgment of clitic form in restructuring verb contexts
- worse scores in ungrammatical condition

What is the role of syntactic complexity?
Leonini (2004)

Participants: L1 German speakers of Italian and natives

Tasks: Oral production

Results: placement unproblematic, frequent clitic omission

(7) a: Che cosa vuole fare la ragazza al ragazzo

‘What does the girl want to do to the boy?’

b: * vuole baciare

ØACC wants.MOD kiss.V

TARGET: Lo vuole baciare
The study

RQ1: “does syntactic and morphological competence in HL diverge from L1 speakers”?

RQ2: “how does syntactic complexity interact with early exposure?”
Hyp1: Syntactic knowledge of clitic constructions in adult HSers will more closely approximate that of L1 speakers than L2ers so long as exposure to Italian takes place in early childhood.

Hyp2: If syntactic complexity affects the processing of accusative clitic structures, then cliticisation with lexical and causative verbs will pose less difficulty and hence be more accurate than modal verbs.

Hyp3: Morphological knowledge of a clitic’s form in adult HSers will more closely approximate that of L2ers even if exposure to Italian takes place in early childhood.
## Method

### Participants: Phase 1 (Sweden)

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>range</th>
<th>AFE IT</th>
<th>M</th>
<th>range</th>
<th>Exposure to IT</th>
<th># L1 IT</th>
<th># L1 SW</th>
<th>Prof</th>
<th>M</th>
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<td>16-52</td>
<td>0.5</td>
<td>0</td>
<td>0-6</td>
<td>22.1</td>
<td>15.3</td>
<td>2-52</td>
<td>6/12</td>
<td>11/12</td>
<td>71.3</td>
<td>11.8</td>
</tr>
<tr>
<td>L2</td>
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<td>43.5</td>
<td>28-54</td>
<td>18.5</td>
<td>13-38</td>
<td>0</td>
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<td>3-27</td>
<td>0/12</td>
<td>12/12</td>
<td>74.8</td>
<td>9.9</td>
</tr>
<tr>
<td>L1</td>
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<td>24</td>
<td>20-35</td>
<td>0</td>
<td>0</td>
<td>/</td>
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<td>4</td>
<td>20-35</td>
<td>18/18</td>
<td>/</td>
<td>86</td>
<td>6</td>
</tr>
</tbody>
</table>

### Participants: Phase 2 (Spain)

In progress!
Method

Materials

Bi-modal syntactic priming and timed GJT

- 3SG accusative clitics
- lexical, causative (quasi-functional), and modal (functional) verbs,
- CCLD structures
- only proclisis.
Method: Syntactic Priming

- la sigaretta, Gianni la vuole fumare a casa
- Il giornale, Alice lo fa leggere a Raniero
- il piano, il pianista lo suona la sera

- La birra, Marco la provare al bar
- pesci Marta pescare da Pietro
- buca operario scavare da solo

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Results: Structural Priming

Morphology: general

HL/L2 groups show very few cases of gender assignment errors of the kind found in L2/HL Spanish contra Hyp3.
Results: Structural Priming

Morphology: general

Effects consistent with Hyp3:
- L1 > L2 and HLs
- No difference between L2 and HLs
- High rates of omission
Results: Structural Priming

Syntax: general

Effect of group inconsistent with Hyp1:

- L1 > L2 and HLs
- No difference between L2 and HLs
Results: Structural Priming

Syntax by complexity and group

At complexity level consistent with Hyp2 and Hyp1:

- lexical and causative > modal + V (HL and L1)
- no difference between lexical and causative (HL & L1)
Results: Structural Priming

Syntax by complexity and group

At group level consistent with Hyp1:

- No difference between HL and L1 for causative structures
- Stronger priming effects HL and L1 > L2 for causative structures
Method: speeded GJT

i pesci Marta **li** fa pescare da Pietro (**grammatical** condition, causative)

Correct, Incorrect, Don’t know (5 sec timeout)

Fixation (3 sec)

la birra Marco **lo** beve al bar (**ungrammatical** condition, lexical)

Correct, Incorrect, Don’t know (5 sec timeout)
Results: Speeded GJT

General: morphology

Percent accuracy in grammatical condition

Overall, no difference between groups consistent with Hyp3
HS and L2 > gr than ungr condition consistent with Santoro (2008)
L1 > HL and L2 in ungr condition consistent with Santoro (2008)
Results: GJT decision times

Decision times

Main group-gr interaction only:
- L1 > HLs in gr condition
- L1 > HLs and L2s in ungr condition
Discussion

RQ1: “does syntactic and morphological competence in HL diverge from L1 speakers”?

Hyp1: Syntactic knowledge of clitic constructions in adult HSers will more closely approximate that of L1 speakers than L2ers so long as exposure to Italian takes place in early childhood.

Yes. Qualitatively, HL and L1 speakers are more similar than HL and L2 speakers with respect to strength of priming for clitic structures of differential complexity. Quantitatively, though, L1 and HL differ.

Conclusion: AOE confers an advantage for syntax.
**Discussion**

RQ1: “does syntactic and morphological competence in HL diverge from L1 speakers”?

Hyp3: Morphological knowledge of a clitic’s form in adult HSers will more closely approximate that of L2ers even if exposure to Italian takes place in early childhood.

Yes. This was found in priming (omission, accuracy higher in L1 group, HL and L2 accuracy similar) and GJT (HL and L2 worse in ungrammatical condition).

Conclusion: AOE does not confer an advantage for morphology.
Discussion

RQ1: “does syntactic and morphological competence in HL diverge from L1 speakers”?

Omissions?

Three sources:

2. Cross-linguistic Influence [Paradis & Genesee, 1996]? Phase 2
3. Interface vulnerability? [Dominguez, 2009]

Clitic-left dislocation = the topicalisation of an object by displacement to a preverbal position in the left periphery of the clause [Rizzi, 1997].
Discussion

RQ1: “does syntactic and morphological competence in HL diverge from L1 speakers”?

Hyp3: Morphological knowledge of a clitic’s form in adult HSers will more closely approximate that of L2ers even if exposure to Italian takes place in early childhood.

No. Very few gender assignment errors in all groups.
RQ2: “how does syntactic complexity interact with early exposure?”

Hyp2: If syntactic complexity affects the processing of accusative clitic structures, then cliticisation with lexical and causative verbs will pose less difficulty and hence be more accurate than modal verbs.

Yes. All 3 groups’ patterns of priming strength were consistent with Cardinaletti and Schlonsky (2008). However, that HL and L1 speakers showed no difference in effects between lexical and causative condition is inconsistent with Santoro (2008).
Discussion

RQ2: “how does syntactic complexity interact with early exposure?”

Syntactic complexity effects were more similar between HL and L1 than L2 speakers for clitic structures.

Conclusion: Complexity interacts with AOE only for syntax and more implicit measures of knowledge (i.e. priming).
ULTIMATE ATTAINMENT IN HERITAGE LANGUAGE SPEAKERS: SYNTACTIC AND MORPHOLOGICAL KNOWLEDGE OF ITALIAN ACCUSATIVE CLITICS.