1. Introduction

This paper proposes an intonational analysis of an innovative focus construction—focused negation and affirmation—in Spanish in contact with Minorcan Catalan (henceforth Contact Spanish). The data presented in (1) and (2) are used as responses to incorrect presuppositions on the part of the listener.

(1)  Focused Negation
No me dijo nada no.
“She DID NOT tell me anything.”

(2) Focused Affirmation
Sí que me lo dijo sí.
“She did tell me.”

These structures have been widely studied in Dominican Spanish (Toribio 2002, Camacho 2005, Lipski 1994, Schwenter 2000, Schwegler 1996) and they are present in other varieties as well as in Catalan. It is to be noted, however, that the final no/sí is not preceded by a pause. Using a final no/sí in Spanish as a tag is a widely-attested phenomenon. Compare the use of the final no/sí as a tag with their monoclausal use exemplified in (1) and (2).

(3)      Spanish
a. No as a tag.
Ese niño no quería ir al médico, no.
“That child indeed does not want to go to the doctor.”
b. Sí as a tag.
Ellos se casaron por la iglesia, sí.
“They were indeed married by the church.”

This paper aims to test via prosodic means whether the sentences attested in Contact Spanish are focused negation and affirmation or tags. These differ in constituency; in (1) and (2) the final no and sí are clause-internal, thus, not separated by a pause, whereas, in (3) the final no and sí are clause-external, therefore, they are preceded by a pause. The intuition that the final no/sí in focused constructions is clause internal is captured in the focus analysis put forth in Toribio (2002), whereby the final no or sí are the exponents of an in situ focus (the head of Focus Phrase, following Kiss 1998).

1 I gratefully acknowledge the helpful comments of Barbara E. Bullock, Almeida Jacqueline Toribio, two anonymous reviewers and the participants in the Hispanic Linguistic Symposium. I also thank Miquel Simonet for his technical assistance and Nuria Sagarra for her help with the statistical analysis. I am also indebted to Araceli de Prada Espinel and César Giraldo for their help in contacting informants, and to my participants. All errors remain my own.

2 They also differ in meaning; intuitively, these focused structures require a licensing context where the speaker can correct the hearer’s presuppositions whereas the tags can be used more freely. For a detailed analysis of the meaning and the licensing conditions for focused negation, consult Schwenter (2005).
The head F subcategorizes for an IP containing the presupposed material, which is subsequently attracted to the Specifier of Focus Phrase (FP) for checking off the strong features in F. The derivation for Dominican Spanish is presented in (4).

(4) TP
   Spec T
   T F Spec FOC'
   F IP
   sí/no [Ellos se casaron por la iglesia]
   [Ese niño no quería ir al médico]

The same analysis can be applied to Minorcan Spanish focused negation. Minorcan Spanish focused affirmation, however, requires, unlike Dominican Spanish, that sí que obligatorily precede the sentence with the clause-final sí. The derivation of Minorcan Spanish focused affirmation may be represented as in (5); as shown, the focused affirmation is preceded by the complementizer sí que.

(5) ForceP
   Force FP
   Sí que Spec FOC'
   sí IP
   [me lo dijo]

The preceding analyses presuppose a monoclausal analysis, which is of interest to our study. To confirm these analyses prosodically, we expect no intonational break preceding the final no/sí, i.e. they are produced in the same phrase as the rest of the clause. If our hypothesis that these constructions are indeed a single phrase is confirmed, we additionally expect the absence of a phrasal boundary. A phrasal boundary can be expressed by changes in the pitch height. These changes can be either (i) a lowering of the pitch preceding the last no/sí as a downstep followed by a rise in the final no/sí or (ii) a drastic lowering of the pitch in the final no/sí indicating that they are tags. Thus, this paper proposes a prosodic analysis of the production of these sentences in order to confirm or reject our hypothesis that these constructions are a single phrase, i.e. a monoclause.

The paper is organized as follows. In section 2, we present the main claims from the field of intonation that motivate our analysis. Section 3 is devoted to the present study, describing the methods, and presenting and discussing the results. Section 4 presents the conclusions.

2. Intonation, Focus and the Monoclausal Analysis

The present section aims to establish the background for our method. The aim of the paper is to explore whether these focus constructions constitute a monoclause using an intonation-based analysis. The literature on focus and intonation concludes that focus in situ is expressed intonationally with a higher F0 produced on the stressed syllable (cf. Face 2001a, 2001b, and 2002, Cabrera Abreu and García Lecumberri 2003, Xu and Xu 2005). However, the focus constructions under study here employ additionally morphology to signal focus rather than signaling it by means of intonation. Therefore, we do not expect to find significant F0 changes. We expect to encounter an intonation contour similar to that found in broad focus or in a statement. The intonation contour for declarative sentences differs in Catalan and Spanish. Broad, declarative focus is defined by the structure of the nuclear accent (the tone in the last stressed syllable of an utterance) in addition to the prenuclear accent and boundary tone. In Catalan, the nuclear accent is L* (Hualde, 1992, Prieto, 2002, 2003), whereas in Spanish it is L+H* (Sosa, 1991, 1999, Face, 2001b, Nibert, 2000). The prenuclear accent is H* in Catalan (Hualde,

(6) Prieto (2001)

In (7), from Face (2001a), we show the intonation contour of Spanish declaratives with a L*+H prenuclear accent, a L+H* nuclear accent and a L-L% boundary tone.

(7) Face (2001a)

However, our use of intonation here is to test the constituency of the final no/si. Thus, more of interest to our purpose are the findings in the literature on constituency prosody. The literature that establishes a link between constituency and intonation widely accepts a mismatch between prosodic form and grammatical function. Nevertheless, some generalizations, regarding pitch changes and vowel lengthening, have been revealed. Regarding F0 changes, we focus here on the F0 height of tags and the use of resets preceding clause-external elements. For example, Payá (2003) and Astruc (2003) note that appositions copy the pattern of the main clause in a lower voice (8b) and Astruc (2003) notices the monotone nature of tags. Comparison between (8a) and (8b) exemplifies the use of a lower and monotone voice in tags (8b).
3. The Present Study

The aim of the study is to draw on prosodic measures to confirm or reject the monoclausal analysis of the innovative constructions in Contact Spanish. The following sections describe the present study.

3.1. Research Questions and Predictions

The study is guided by the research questions and predictions outlined here:

Research questions

1. Are no or si clause-external? In order to test the constituency of the final no or si, we examine the changes in the F0, bearing in mind the findings in the constituency prosody literature. More specifically we explore the following possibilities:
   i. Is there a pitch reset before the final no or si indicating that the no or si constitute a different phrase?
   ii. If so, does the phrase end with a low boundary tone (L-), indicating finality, or a high boundary tone (H-)? Is the F0 lower in the last no or si with respect to the syllable preceding it?
2. Is there a difference in the sentence type (negative vs. affirmative)?
   i. Is the focus analysis confirmed only for negation or for affirmation?
3. Does the L1 matter?
   i. Since this construction is attested in Minorcan Catalan, is it present in the Spanish of
      Minorca or just in those speakers whose L1 is Minorcan Catalan (i.e. has this
      innovation spread to Spanish L1 speakers?)

Predictions
1. The monoclausal focus analysis will be confirmed for some speakers.
   i. The speakers that use these focus constructions will not show a pitch reset
      preceding the final no or si and these will not be produced on a lower pitch than the
      preceding word. Thus, we expect for these participants to produce these structures in
      a monoclause, i.e. in a single phrase. For those speakers who do not use these
      innovative constructions, there will be a reset signaling a boundary tone.
   ii. If this boundary tone is L-, marking the extrasentential nature of the final no
       or si, the last no and si will be produced in a higher pitch. If the boundary tone is H-,
       the last no and si will be produced in a lower pitch. The difference between L- and
       H- is that L- indicates finality, whereas H- does not.
2. The analysis is expected to be confirmed for both focused negation and affirmation. Both
   constructions are analyzed as being a monoclause. Thus, no differences are expected.
   However, the use of si and no as a tag is common in Spanish. As a consequence, it is
   important to be able to distinguish between the final no and si as a tag from its use as
   focus.
3. Some differences will be found between the Spanish L1 speakers and the Minorcan
   Catalan L1 speakers. Since these focus constructions are argued to be present in Catalan
   and transferred into their L2, Spanish, Spanish L1 speakers are not expected to produce
   it. If the Spanish L1 speakers produce it, this would indicate that the transfer from
   Catalan took place some generations ago, and this construction would be considered part
   of the variety of Spanish spoken in Minorca.

Due to the fact that these constructions are uncommon in monolingual Spanish\(^3\), our hypothesis is that
they are transferred from Catalan, where these structures exist. For this reason, we consider Catalan L1
speakers separately from Spanish L1 speakers.

3.2. Method

In order to address the above research questions and predictions, speakers of Minorcan Spanish
were recruited for an experimental study of controlled laboratory speech. Minorca was chosen because
we had previously noticed the presence of this construction in the Catalan and Spanish spoken on the
island. We informally queried speakers of other varieties of Catalan (Barcelona, Girona, and Majorca)
and they reported that they use these structures as well. However, further inspection into the extension
of the structure in other dialects of Catalan and Spanish is necessary. Little is known about Minorcan
Spanish. However, Catalan-like features in Minorcan Spanish have been previously pointed out in the
literature (Mascaró i Pons 1987, Romera 2003), thus making this an ideal variety for the study of
Spanish in contact with Catalan.

3.2.1. Participants

Twenty-three bilinguals, ranging in age from 23 to 65 participated in the study, 8 of them were
male and 12 female. At the time of study, all had been living in Minorca for at least 11 years. Fifteen
participants were born in Minorca, and eight of these had always lived in Minorca (the remaining
seven had lived outside the island for periods of 2-16 years). Seven participants were not born in
Minorca, but had lived there for 11-40 years. The participants represented different points along the
bilingual continuum: balanced Catalan-Spanish bilinguals, Catalan-dominant bilinguals, and Spanish-
dominant bilinguals with different usage patterns of Catalan (passive or active knowledge of Catalan).
Five participants were Spanish-dominant, one English-dominant and one Majorcan Catalan-dominant.

\(^3\) These structures are also attested in Dominican Spanish, Lipski (1994) argues that these are the result of contact
with Haitian Creole. Thus, our hypothesis is that these structures emerge in Spanish in contact.
Of the participants born in Minorca, four rate both their languages equally and only one is Spanish dominant.  

Only those participants whose L1 was either Minorcan Catalan or Spanish and who could read fluently were considered for the analysis. Three participants were, thus, excluded: one was English dominant, one could not read well enough to perform the task and one was Majorcan Catalan dominant, leaving twenty—6 Spanish L1 and 14 Minorcan Catalan L1—who completed all tasks. 

The participants were given a language background questionnaire which allowed for them to be classified according to self-rating of proficiency and use of the language. As an independent measure of proficiency, they completed part of the Intermediate DELE (Diploma de Español como Lengua Extranjera) for Spanish and part of the Level 2 (Low intermediate) Certificat de nivell elemental de Català (A Elemental) for Catalan.  

They were classified into two groups according to their L1 and their use of L1. Among the 6 Spanish L1 speakers, the self-rating of their Catalan varied from 2 to 6 and they claim to use it very rarely or never. Among the 14 Catalan L1 speakers, their self-rating of Spanish varied from 5-7 and they claim to use it very rarely. Due to the small sample, further divisions of the participants could not be used to make generalizations. A full-scale experiment should consider age, gender and socioeconomic status as well as length of residence as possible contributing variables.

3.2.2. Materials

The participants were recorded in two tasks that elicited oral Spanish-language utterances, although only one task is discussed here. In this task, participants were presented with dialogues to be performed with the investigator. The dialogues were presented on index cards, and the performance was recorded. Two sample dialogues appear in the appendix. The style of the dialogues is colloquial and some situations include contexts of focused negation and affirmation. The dialogues yielded nineteen sentences per each of twenty participants. The data were submitted to prosodic analysis.

3.3. Analysis

Prosodic analysis was performed with Praat (Boersma and Weenink 2005). Particular attention was paid to the F0 height in different points. Ten focused negation and nine focused affirmation sentences were analyzed.

The F0 height was measured in three points in each sentence, corresponding to the three syllables stated above: the first no/sí (henceforth p1), the syllable preceding the final no/sí (p2), and the final no/sí (p3). For these measures, the pitch is normalized by subtracting the minimum pitch from the F0 in each point. This normalization prevents differences in pitch across speakers affecting the results. In order to reconstruct the pitch pattern, we subtracted the pitch values to determine whether there is a rising or a falling pitch between p1 and p2 (henceforth p2p1) and between p2 and p3 (p3p2). P2p1 is expected to be rising if there is not a low boundary tone, i.e. indicating that it is a monoclause. P3 is

---

4 Due to historical reasons, age may be an index of proficiency in Spanish; thus, participants can be classified in three generations. The first generation is expected to have a lower proficiency in Spanish than younger generations, which learned Spanish in school and other contexts (media). The second generation is subject to more prescriptive grammar in Spanish since they could only be taught in Spanish in school and they were forced to speak it, whereas the third generation, due to a change in languages and education, uses both languages in school, although more Catalan than Spanish. With respect to proficiency in Catalan, persons born outside the island are expected to have a lower proficiency in Catalan or to have only passive usage of the language.

5 Unfortunately, these measures did not provide sufficient information. The section of the DELE was not sensitive enough since the participants’ proficiency in Spanish was native-like, and the section of the A Elemental, which is based on a normative dialect and prescriptive grammar, only revealed access to advanced education in Catalan. As a consequence, the participants were classified in two groups according to the information provided in the language background questionnaire about their L1 and the use of their L1. An anonymous reviewer suggests dividing them into four groups considering their L1 and their length of residence. Due to the pilot nature of this project, only one of the participants would be in the group Spanish L1 born in Minorca. As a consequence, a statistical analysis was not possible. Future research will aim at looking at the effect of length of residence in the use of these focus constructions.
expected to be lower if the last no/sí is treated as a tag. Figures (9) and (10) exemplify these three points in the following sentences:

(9) F0 height in focused negation

\[ \text{No te lo han robado no (Participant 20)} \]

neg cl.dat. cl.acc rob3sg.pres.perf neg

“They did NOT steal it”

(10) F0 height in focused affirmation

\[ \text{Sí que la ha visto sí. (Participant 2)} \]

yes that cl.acc. see.3sg.pres.pft. aff.

“He did see it.”

The results from the measurements for F0 height are presented in the following section.

3.4. Results

The pitch height in p2, the syllable preceding the final no/sí, shows the differing patterns for Catalan and Spanish L1 speakers. Spanish L1 speakers have lower pitch in negative than in affirmative focus sentences, whereas Catalan L1 speakers have higher pitch in negative than in affirmative sentences.
Next we consider the results regarding the pitch pattern. The results from p2p1 are presented in graph (12). Up to p2, the pitch in affirmative and negative sentences falls, although the affirmative falls more than the negative, especially in the Catalan L1 speakers.

These results require a detailed analysis of each sentence, as a consequence, the data was submitted to further analysis of F0 changes. The data were classified via auditory and visual inspection, with the help of Praat’s pitch tracker. First, it was determined whether there was a pitch reset or not. For a pitch reset to be determined, a breach in the F0 and a change in the pitch height had to be observed. In the case of a pitch reset, it was classified as a H- or a L- by inspecting the shape of the F0 before this point and determining if it was an example of downstep, in which case it was classified as L-, or if the pitch raised before this point, then, H- was assigned. There were cases, too, where the pitch ended in a medium height in syllable 2 and was, then, followed by the final no/sí in a lower voice or in a monotone. These cases were classified as a tag. The following table summarizes the results:
The main result consists of the absence of resets only in the negative sentences in the Catalan L1. All the other cases constitute two different phrases. The absence of H- in the Spanish L1 may indicate a further difference in constituency. It could be argued that H- indicates that the final no/sí constitutes a different phrase, nonetheless, this phrase may not be clause-external. In the case of L-, it is evident that the final no/sí are clause-external because L- indicates finality and the final no/sí are produced in a higher pitch as in the transition between sentences.

3.5. Discussion

In this section, we discuss the above results with the hypothesis stated in the research questions in mind.

The results offer evidence of the lack of monoclausal negative and affirmative constructions in the Spanish L1 group. However, the Catalan L1 group presents evidence of a monoclausal negative focused clause. The results regarding F0 show a sentence type effect for the Catalan L1 group in p2p1; in affirmative sentences, the pitch falls significantly lower than in negative sentences. This evidence rejects the presence of focused affirmation in the speech of Catalan L1 speakers. These two results seem to conflict with our claim that focused negation and affirmation are borrowed from Catalan. Thus, a borrowing scenario cannot be maintained since, in such a case, both would be present in the speech of Catalan speakers. An individual analysis of each sentence reveals interesting contrasts that can elucidate these results. Specifically, only the Catalan L1 speakers read sentences without resets and only with negative sentences, demonstrating that focused negation only occurs in Catalan L1 speakers but that focused affirmation does not exist for either group. The existence of two phrases, as in (3) above, is confirmed for both groups. However, the surprising result is the use of resets with H- in the Catalan L1 group. Both languages have been described as using L- to express finality, whereas H- is used to express continuity. The use of H- by the Catalan L1 group requires further attention. It can be interpreted as an intermediate strategy, used to mark an external element, produced in a different phrase, but not sentence-external, as a tag. Thus, whereas the Spanish L1 group only produces sentence-external final no and sí, the Catalan L1 group produces these final elements in one phrase or in two. When it is produced in two, this group further differentiates between sentence-external and sentence-internal negative and affirmative markers. This result indicates, in good agreement with previous literature (cf. Khattab (forthcoming), that bilinguals have a wider repertoire of intonation uses for pragmatic purposes than monolingual do.

Bearing in mind these results, we now return to the research questions outlined above.

1. Are no or sí clause-external?

They can be. There are two different structures; focused constructions and tags. Only focused negation exists and only in the Catalan L1 speakers, as evidenced by the absence of resets. There is no evidence in favor of considering focused affirmation in this variety of Spanish. The use of tags,
however, is confirmed for both groups. An intermediate category using H- indicates the use of two phrases for clause-internal elements in the Catalan L1 group.

2. Is there a difference in the sentence type (negative vs. affirmative)?

The focus analysis is only confirmed for negative sentences. The use of focus affirmation is not present in the data and, as a consequence, cannot be confirmed. The data in Dominican Spanish needs to be submitted to a prosodic analysis in order to confirm that a common analysis of negation and affirmation can be posited. For now, we can only confirm the proposed analysis for focused negation in Minorcan Spanish in the Catalan L1 speakers. As for the emergence of this structure, we can preliminary argue that, since the sentence initial no is a phonological clitic, it cannot be stressed. Thus, a higher F0 aligned with the stressed syllable cannot be used in order to mark focus. Given that this strategy is unavailable, focus is conveyed morphologically through the in situ focus no. In the case of the affirmative sentences, we can argue that the absence of a morphologically marked focus can be explained by the presence of sí que. Sí que expresses focus and can actually be intonationally marked as well. The fact that the Dominican data does not require the use of sí que may be an indication that the final si is clause-internal and it is indeed a morphological marking of focus. A prosodic analysis of Dominican data would provide insightful evidence on this claim. If proven that Dominican Spanish exhibits focused affirmation, we can claim that the emergence of this structure is the result of the unavailability of intonationally marking focus, due to the absence of an affirmative marker and the clitic nature of the negative marker.

3. Does the L1 matter?

There is an effect of L1. Only the Catalan L1 speakers use a single phrase for focused negation and resets with H-. This fact indicates that focused negation is transferred into their L2 but this phenomenon has not spread yet to the speech of L1 speakers of Spanish. In addition, the use of H- indicates the broader range of use of intonation bilinguals have.

4. Conclusions and Further Research

The aim of this paper was to confirm a syntactic analysis of two innovative structures present in Minorcan Spanish: focused negation and affirmation. The syntactic analysis discussed here argues for a monoclausal, i.e., it predicted a lack of a pause preceding the final no/sí. For this purpose, 20 participants were recorded reading these types of sentences and grouped according to their L1.

Regarding the Catalan L1 speakers, the results confirm the monoclausal analysis for the negative sentences. These results distinguish the cases where these speakers produce these focus constructions from those where the final no/sí is clause external. However, the materials were prepared for the participants to read each sentence as a focus structure. The differences between focus structures and tags need, therefore, further work. Bearing these differences in mind, new materials can control the participants’ production of one or another. The use of H- also remains rather unexplained here and needs further work so as to find a satisfactory explanation of the difference between resets with H- and resets with L-. This explanation can then conclude whether the final no/sí preceded by a H- tone should be treated as sentence-external or internal. As for focused affirmation, no evidence was found that it exists in this dialect. Further inspection into the Dominican focused affirmation can inform us of the emergence of focused structures. It can confirm whether they result from the unavailability of intonationally marking the polarity of the phrase, due to the clitic nature of the negative marker and the absence of an affirmative marker.

It is important to acknowledge the pilot nature of the study. The number of participants precluded a more accurate grouping of participants, considering factors such as length of residence in Minorca or outside the island, age, gender and socioeconomic status. We acknowledge, therefore, the heterogeneity of the groups. In addition, it is necessary to construct a more refined instrument for measuring the participants’ actual proficiency in both languages.

Further research needs to elucidate the role of language contact. Among the participants, some of the native speakers of Minorcan Catalan claim that this negative focus construction is “transferred” from Catalan. Thus, the corresponding data in Catalan needs to be attested and compared. The presence of this construction in Dominican Spanish has also been attributed to contact with Haitian Creole (Lipski 1994), thus, the emergence of such a construction could be argued to be accelerated in contact Spanish. Also, a Spanish monolingual control group is needed.6 The results indicate the

---

6 We have collected monolingual Spanish data in Valladolid, the analysis of which is still pending.
differential behavior of the Spanish L1 group from the Catalan L1 group but we cannot argue against the influence of Catalan into the Spanish of the Spanish L1 group without a Spanish monolingual control group. These results indicate that the Spanish L1 group differs in the prosody from the Catalan L1 group. New materials can use grammaticality judgments in order to see whether the Spanish L1 group has acquired the structure but not the intonation associated with it.7

Finally, the fact that bilinguals possess a more refined use of intonation needs to be further explored. More data should be analyzed to explore the actual use of H- and other related contours.

5. Appendix

(i) Contexto: Dos amigos se encuentran en un bar del Puerto

Context: Two friends meet in a bar in the harbour.

Ana: ¡Hola!
“Hi!”

Tú: ¡Ana! ¡Cuánto tiempo!
An! how-much time
“Ana! Long time no see!”

Ana: ¿Qué haces por aquí?
what do2sg. around here
“What are you doing here?”

Tú: Ya ves, nada.
already see2sg. nothing
¿Qué llevas mucho por aquí?
int.marker take2sg. a lot around here
“Nothing, really. Have you been around for a while?”

Ana: No, dos meses.
no two months.
“No, for two months.”

Tú: Sí que es mucho sí.
yes that be3sg. a lot affirm.
“It IS a long time.”

Ana: Bueno, nunca es mucho tiempo aquí, de vacaciones.
Well, never be3sg. a lot time here on vacation.

Tú: Ya veo, a mí me gustaría estar de vacaciones pero no es así.
already see1sg. to me cl.dat like cond.3sg. be on vacation but neg be3sg. like that.
“I see, I would like to be on vacation but it is not like that.”

Ana: ¡Qué lástima! Bueno, llámame el fin de semana
what shame well call-cl.acc. the weekend
si quieres salir.
if want2sg. go out.
“That’s a shame. Well, give me a call this weekend if you want to go out.”

(ii) Contexto: Ana siempre intenta quedar contigo pero es un poco pesada y quieres librarte de ella

Context: Ana is always trying to meet you but she is a little bit of a pain and you want to get away.

Ana: Tienes tiempo, ¿no?
have2sg.time no
“You have time, don’t you?”

Tú: No tengo mucho tiempo no.
neg have1sg.a lot time neg
“I do NOT have a lot of time.”

7 This study is part of a larger study. Other materials in this study contain grammaticality judgments that can shed some light to this issue. A preliminary analysis of these data indicate that the Spanish L1 group accept focused negation more than the Spanish monolingual group.
Ana: ¡Qué pena! ¿Puedes quedar más tarde?

Tú: No tengo mucho tiempo hoy. “I don’t have much time today.”

Ana: Bueno, ¿tienes tiempo mañana?

Tú: No, lo siento, pero esta semana me viene fatal. “No, I’m sorry, but this week is terrible for me.”


Tú: ¡Vale!

References


Boersma, Paul and David Weenink (2005) Praat: a system for doing phonetics by computer. [Computer program].


Selected Proceedings of the 10th Hispanic Linguistics Symposium
edited by Joyce Bruhn de Garavito and Elena Valenzuela

Cascadilla Proceedings Project Somerville, MA 2008

Copyright information
Selected Proceedings of the 10th Hispanic Linguistics Symposium © 2008 Cascadilla Proceedings Project, Somerville, MA. All rights reserved
ISBN 978-1-57473-427-0 library binding
A copyright notice for each paper is located at the bottom of the first page of the paper. Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information
Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:
Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, e-mail: sales@cascadilla.com

Web access and citation information
This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:
or: