

## Concessive Scalar Items: More about *Siquiera* in Spanish

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Crnič (2011a,b) uses the term ‘concessive scalar particles’ (CSPs) to refer to a class of focus sensitive polarity items (Slovenian *magari*, Greek *esto*, Spanish *siquiera*) with a superficially similar distribution and interpretation. CSPs convey a strengthening effect in DE contexts (1), a ‘settle for less’ interpretation in modal contexts (2), and a negative bias in questions.

- (1) Juan no leyó siquiera el primer capítulo. (2) ¡Lee siquiera el primer capítulo!  
Juan neg read:3s SIQUIERA the first chapter read-imp SIQUIERA the first chapter  
‘Juan didn’t even read the first chapter’ ‘Read at least the first chapter.’

While similar, CSPs differ, and no general analysis exists: those presented for *magari* (Crnič 2011a,b) and *esto* (Giannakidou 2007) do not extend to Spanish *siquiera* (Alonso-Ovalle 2016).

**Contribution.** We document further dialectal variation in the distribution of *siquiera* and capture this variation within an extension of the alternative-based analysis of *siquiera* presented in Alonso-Ovalle 2016. We propose that the assertive contribution of *siquiera* is the same in all varieties, but that the difference stems from the types of alternatives that *siquiera* triggers. In (contemporary) Iberian Spanish, *siquiera* triggers ‘symmetric’ alternatives (alternatives whose disjunction is equivalent to the assertion) like other polarity elements do (Chierchia 2013), but only scalar alternatives in non-Iberian varieties (i.e. Andean Spanish).

**The puzzle.** Like *magari* (Crnič 2011 a,b), *siquiera* is deviant in positive episodic sentences in (contemporary) Iberian Spanish but licensed in the contexts in (1-2), with the interpretation discussed above. In Andean Spanish, *siquiera* is licensed in the contexts in (1-2) too, with the same interpretation, but also in positive episodic sentences (3) (Heredia *et al.* 2019). This poses constraints on any analysis of *siquiera*, which should at least be consistent with the attested variation—the overlap in interpretation and the contrast in distribution.

- (3) Siquiera los viejos me compraron unos guaraches.

SIQUIERA the old ones me bought:3pl some guaraches

‘At least the elders bought me a pair of guaraches’ <https://tinyurl.com/yjlrzc57>

**Proposal.** We take as starting point an analysis of *siquiera* along the lines of Alonso-Ovalle 2016, with some modifications. We treat *siquiera* as a focus sensitive propositional operator (4). As Crnič (2011a,b) proposed for CSPs in general, *siquiera* presupposes that the focus alternatives of its argument (its *prejacent*) are ranked in a contextually determined scale. Moving beyond Crnič’s proposal, which assumed a likelihood-based ranking, we leave the nature of the scale open. As Crnič suggested, *siquiera* weakens its argument by mapping it to the proposition that is true at a world  $w$  if its prejacent or a higher ranked alternative is true in  $w$ . To illustrate: the LF of the positive counterpart of (1) is in (4), where we assume *siquiera* takes a covert free variable ranging over scales that rank propositions. This variable is represented here as a subscript  $C$  (we use  $\mathbf{C}$  for its semantic value.) Assuming the focus alternatives in (5a) and the ranking in (5b), (4) denotes the disjunction of the proposition that Juan read chapter 1 and the proposition Juan read another chapter (i.e. that J read a chapter (6).)

(4) LF:  $siquiera_C$  [Juan read the [first]<sub>F</sub> chapter]

(5) a. {that Juan read chapter 1, that Juan read chapter 2, that Juan read chapter 3}

b.  $\mathbf{C}$ : that Juan read chapter 1 < that Juan read chapter 2 < that Juan read chapter 3

(6) When  $\llbracket \mathbf{C} \rrbracket = (5b)$ ,  $\llbracket (4) \rrbracket^o = \lambda w. \text{READ}_w(j, c_1) \vee [\text{READ}_w(j, c_2) \vee \text{READ}_w(j, c_3)]$

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*Siquiera* introduces two alternatives into the semantic derivation: its prejacent, and the proposition that is true in a world  $w$  if at least one proposition higher than the prejacent is true in  $w$  (7). As assumed for free choice items (Chierchia 2013), a covert exhaustivity operator (8) accesses these alternatives, and strengthens its prejacent by excluding those alternatives that it does not entail (9). Since the alternatives are ‘symmetric’—the assertion entails that at least one of them is true (Schwarz 2016)—this obligatory strengthening yields a contradiction (10).

(7)  $\llbracket(4)\rrbracket^{\text{alt}} = \{\lambda w. \text{READ}_w(j, c_1), \lambda w. [\text{READ}_w(j, c_2) \vee \text{READ}_w(j, c_3)]\}$

(8) LF: O *siquierac* [Juan read the [first]<sub>F</sub> chapter]

(9)  $\llbracket(8)\rrbracket^{\circ} = \lambda w. \llbracket(4)\rrbracket^{\circ}(w) \ \& \ \forall p \in \llbracket(4)\rrbracket^{\text{alt}} [p(w) \rightarrow p \subseteq \llbracket(4)\rrbracket^{\circ}]$

(10)  $\lambda w. R_w(j, c_1) \vee [R_w(j, c_2) \vee R_w(j, c_3)] \wedge [\neg R_w(j, c_1) \wedge \neg R_w(j, c_2) \wedge \neg R_w(j, c_3)]$

In (11), negation combines pointwise with the alternatives introduced by *siquiera*, feeding O with the alternatives in (13). The prejacent of O (12) entails these alternatives, so no contradiction is derived. The weakening induced by *siquiera* results in overall strengthening.

(11) LF: O neg *siquierac* [Juan read the [first]<sub>F</sub> chapter]

(12)  $\lambda w. \neg R_w(j, c_1) \wedge \neg R_w(j, c_2) \wedge \neg R_w(j, c_3)$  (13)  $\{\lambda w. \neg R_w(j, c_1), \lambda w. \neg R_w(j, c_2) \wedge \neg R_w(j, c_3)\}$

When a necessity modal intervenes (14), no symmetric alternatives obtain: the assertion (15) does not entail the disjunction of the alternatives in (16). (14) conveys (17), capturing the ‘settle for less’ effect—(14) entails that the addressee *can* read only the first chapter.

(14) O  $\square$  *siquierac* [J. read the [first]<sub>F</sub> chapter] (15)  $\lambda w. \square (R_w(j, c_1) \vee [R_w(j, c_2) \vee R_w(j, c_3)])$

(16)  $\{\lambda w. \square (R_w(j, c_1)), \lambda w. \square [R_w(j, c_2) \vee R_w(j, c_3)]\}$

(17)  $\lambda w. [\square (R_w(j, c_1) \vee [R_w(j, c_2) \vee R_w(j, c_3)])] \wedge \neg \square (R_w(j, c_1) \wedge \neg \square [R_w(j, c_2) \vee R_w(j, c_3)])$

This captures the basic pattern for Iberian Spanish (for an extension of this setup to questions, see Alonso-Ovalle 2016). We hypothesize that the difference between Iberian and Andean Spanish does not rely on the assertive component of *siquiera*, which is identical (18-19) but on the types of alternatives that *siquiera* introduces. We suggest that in Andean Spanish, *siquiera* does not introduce symmetric alternatives, but rather only a ‘scalar’ alternative conveying that at least one proposition ranked higher than the prejacent is true (20).

(18) LF: <sup>AS</sup>*siquierac* [Juan read the [first]<sub>F</sub> chapter]

(19)  $\llbracket C \rrbracket = (5b)$ ,  $\llbracket(18)\rrbracket^{\circ} = \lambda w. \text{READ}_w(j, c_1) \vee [\text{READ}_w(j, c_2) \vee \text{READ}_w(j, c_3)]$

(20)  $\llbracket \text{Juan read the [first]<sub>F</sub> chapter} \rrbracket^{\text{alt}} = \{\lambda w. [\text{READ}_w(j, c_2) \vee \text{READ}_w(j, c_3)]\}$

As before, in negative contexts (21), the assertion (22) entails the alternative (23) and exhaustification is vacuous. When a necessity modal intervenes (24), the resulting strengthened meaning (26) also conveys ‘a settle for less’ effect (that the addressee does not need to read more than the first chapter). The resulting meaning is weaker than its Iberian Spanish counterpart, though, since it allows for the possibility that the addressee is *required* to read only the first chapter. A *defeasible* pragmatic competition between (24) and the stronger (and less complex) (25) should deliver the implicature that the addressee is not required to read the first chapter, which, together with (26), gives us the desired equivalence with the Iberian Spanish interpretation.

(21) LF: O neg <sup>AS</sup>*siquierac* [Juan read the [first]<sub>F</sub> chapter]

(22)  $\lambda w. \neg R_w(j, c_1) \wedge \neg R_w(j, c_2) \wedge \neg R_w(j, c_3)$  (23)  $\{\lambda w. \neg R_w(j, c_2) \wedge \neg R_w(j, c_3)\}$

(24) O  $\square$  <sup>AS</sup>*siquierac* [Juan read the [first]<sub>F</sub> chapter] (25)  $\square$  [J read the [first]<sub>F</sub> chapter]

(26)  $\lambda w. [\square (R_w(j, c_1) \vee [R_w(j, c_2) \vee R_w(j, c_3)])] \wedge \neg \square [R_w(j, c_2) \vee R_w(j, c_3)]$

In positive episodic environments, (27), exhaustification does not yield a contradiction. When the scale is as in (5b), (27) denotes the proposition that Juan only read the first chapter (28). Note that, unlike in (24), the meaning of the structurally simpler LF in (28) is *entailed* by (27), so no pragmatic competition arises. In cases where the scale is one reflecting the speaker

preferences (that reading that the speaker would have preferred higher scalar values), (27) conveys a concessive interpretation—that at least Juan read the first chapter.

(27) LF:  $O^{AS}$  *siquiera*<sub>C</sub> [Juan read the [first]<sub>F</sub> chapter] (28) LF: [Juan read the [first]<sub>F</sub> chapter]

(29)  $\lambda w. \text{READ}_w(j, c_1) \wedge \neg [\text{READ}_w(j, c_2) \vee \text{READ}_w(j, c_3)]$

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