The Complementizer Particle *si* of Spanish Spoken in Guayaquil, Ecuador
Introduction

There is a variety of ways in which languages form yes/no (or polar) questions. Some languages, including English, employ subject-auxiliary inversion for yes/no question formation. Other languages use complementizer particles before the verb to form yes/no questions, as does Irish (Carnie, 2007).

Linguists normally think of Spanish as a language that employs subject-auxiliary inversion. An example of how this works is in (1).\(^1\)

\begin{align*}
(1) \quad &\text{¿Tiene Miguel una computadora?} \\
&\text{Have.3rd.sg Miguel a computer?} \\
&\text{‘Does Miguel have a computer?’}
\end{align*}

This construction actually appears to involve a subject-main verb inversion. However, this is because, different than English, Spanish verbs undergo verb raising to the inflection head position in order to acquire tense marking. Because main verbs raise to the inflection head position, they are able to participate in subject inversion in yes/no question formation.

In some dialects of Spanish (mostly Caribbean varieties), inversion is not necessary. Yes/no question formation as in (2) is perfectly acceptable in these dialects (Zagona, 2002).

\(^1\) The abbreviation used for glosses are:

\begin{align*}
\text{3rd} & \quad \text{3rd person} & \text{SC} & \quad \text{subject concord} \\
\text{SG} & \quad \text{singular} & \text{COP} & \quad \text{copula} \\
\text{PRES} & \quad \text{present tense} & \text{PROPNAME} & \quad \text{proper name} \\
\text{QP} & \quad \text{question particle}
\end{align*}
(2) ¿Miguel tiene una computadora?
Miguel have3rd.sg a computer?
‘Does Miguel have a computer?’

Although there are different ways of yes/no question formation in Spanish, there are no studies of which I am aware that look at the possibility of yes/no question formation in Spanish employing a complementizer particle.

Prieto and Rigau (2007) studied the use of complementizer particles in certain dialects of Catalan. They say that this phenomenon is unique to Catalan among romance languages. I argue, however, that this is not entirely true. A dialect of Spanish spoken in Guayaquil, Ecuador optionally adds the complementizer particle \textit{si} ‘if’ to subject-auxiliary inversion in yes/no question formation. The question in sentence (3) shows this formation using \textit{si}.

(3) ¿Si tiene Miguel una computadora?
If(QP) have3rd.sg Miguel a computer?
‘Does Miguel have a computer?’

In this paper, I argue that the appearance of \textit{si} in yes/no questions of Guayquil Spanish should be analyzed as a question particle and that the existence of such a complementizer particle provides evidence that Rizzi’s (1999) expanded complementizer system found in embedded clauses also appears in sentence initial position. I divide my discussion into four sections. In the first section, I provide a brief overview of research relevant to this phenomenon. In the second section, I analyze the syntactic properties of the construction of yes/no questions in Spanish spoken in Guayaquil, Ecuador. In the third section, I discuss the implications that this analysis might have on future syntactic analyses.
Regarding yes/no question formation. Finally, I propose future research for a better understanding of the phenomenon presented herein.

**Research on yes/no question formation**

Dryer (2005b) shows seven different methods that languages employ to form yes/no questions. Table 1 lists these methods of yes/no question formations accompanied by total number of languages utilizing them (out of a total of 842 languages) and an example of each method.

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of languages</th>
<th>Example Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>question particle</td>
<td>520</td>
<td>Mybrat, Kiowa</td>
</tr>
<tr>
<td>interrogative verbal morphology</td>
<td>155</td>
<td>Hunzib, Tunica</td>
</tr>
<tr>
<td>interrogative intonation only</td>
<td>138</td>
<td>Colloquial Italian</td>
</tr>
<tr>
<td>question particle and interrogative verbal morphology</td>
<td>12</td>
<td>Pirahā</td>
</tr>
<tr>
<td>interrogative word order</td>
<td>12</td>
<td>German</td>
</tr>
<tr>
<td>absence of declarative morphemes</td>
<td>4</td>
<td>Zayse</td>
</tr>
<tr>
<td>no interrogative-declarative distinction</td>
<td>1</td>
<td>Chalcatongo Mixtec</td>
</tr>
</tbody>
</table>

Of these different methods of yes/no question formation, Dryer (2005a) further specifies languages that utilize question particles. He shows that there are different methods...

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2 Examples are taken from Dryer (2005b) who cites various authors for the sources of his examples.
positions where question particles situate in sentences. Dryer also mentions that there are some languages that make use of two different methods of yes/no question formation. He states that Ocuiteco, an indigenous language in Mexico, usually uses intonation for question formation, but that the use of a question particle is also permissible. That some languages have optional methods for yes/no question formation is important for the analysis put forth in this paper. The dialect of Spanish spoken in Guayaquil normally employs the method used by other Spanish dialects—by interrogative word order as seen in (2). However, this dialect optionally employs the use of a question particle as seen in (3).

Another important factor in question formation, as shown in Dryer’s overview, is the prosody that often accompanies syntactic markers and sometimes is the sole indicator of an interrogative statement. Research regarding intonation and question particles (see Prieto & Rigau, 2007 and Zerbian, 2006) has shown that in these languages, intonation is the primary method of forming interrogative statements and that when particles are used, they serve a pragmatic function. Prieto and Rigau posit that, in Catalan, a change in the intonation contour (rising for some dialects, falling for others) accompanied by a question particle complementizer encode a politeness factor that communicates a low cost or high benefit request to the hearer.

Although prosody is an important avenue in the study of yes/no question formation and does interact with syntax, it does not fall within the scope of this paper. However, in classifying methods employed in yes/no question formation in Spanish, we must understand that intonation alone is another option of some dialects of Spanish interrogative formation (see Beckman, Díaz-Campos, McGregory & Morgan, 2002 for a discussion on intonation across Spanish dialects).
Because intonation is not the only factor in interrogative statements in Spanish, understanding these statements leads to a syntactic explanation. Spanish word order is generally somewhat unconstrained. In fact, there has been some discussion on whether it is an SVO language or an SOV language. Goodall (1991) argues that Spanish is an SOV language based on his analysis on wh-question formation. Torrego (1984) also explains that Spanish generally has a very free subject-verb order but that inversion is obligatory in wh-question formation. This obligatory subject-verb inversion also seems to apply to yes/no questions. Because there is a stricter word order in interrogative formation in Spanish, an explanation of this phenomenon is important. Such an explanation is inherent in the complementizer system.

**Research on complementizer phrases**

Rizzi (1999) proposes that the complementizer system does not consist of one complementizer head and a series of bar level projections that constitute a phrasal level projection. He proposes that:

The primary role of the complementizer system is the expression of Force (distinguishing various clause types: declarative, interrogative, exclamative, relative, comparative, different types of adverbial clauses, etc.) and Finiteness (the specification distinguishing at least between finite and nonfinite clauses). (pg. 1)

He further states that the complementizer system constitutes at least two different heads that serve the purpose of indicating force and finiteness. He also discusses that there are other positions that house topical information, focal information and, in the case of
interrogative statements, a position that houses an interrogative head. According to this analysis, the complementizer system would look something like (4).

(4) FORCE (TOP) INT (TOP) FOC (TOP) FIN IP

Rizzi uses examples of embedded yes/no questions in Italian to show that the structure of CP looks like the phrase structure in (4).

McCloskey (2001) argues that Irish complementizer particles in yes/no questions simultaneously fill the FORCE and the FIN head of the CP. This analysis involves movement of the complementizer particle from the finite head position to meet requirements for expressing finiteness into the FORCE head to meet requirements for expressing question formation. McCloskey suggests that the other projections are optional depending on the needs of the topicalized elements. Whether these projections are present in all CPs or whether they are only found in clauses with topicalized elements is not completely understood; however, this need not be addressed for the purposes of this paper, which focuses on yes/no questions that obligatorily include at least the interrogative head.

A short discussion regarding the existence of non-phonetically realized constituents is important at this point. Bošković (1997) entertains the idea that there is no complementizer projection in sentences such as those in (5a). However, because of the overt complementizer, a complementizer projection does exist in (5b).

(5) a. George thinks syntax is interesting.
   b. George thinks that syntax is interesting.

Analyses that do not include non-pronounced items may seem intuitive; however, Kishimoto (2006) argues against such an analysis. He illustrates that because of evidence
found in the Kansai dialect of Japanese, a null complementizer, although not overt, must still exist. Yes/no question constructions in languages with complementizer particles also provide evidence of an otherwise phonetically null complementizer position (Carnie, 2007). The important point is that although phonetically null, constituents do exist.

Regardless of the ultimate existence of the sub-projections of complementizer phrases (CPs) in all clauses, the CP structure proposed by Rizzi (1999) is important to my analysis of yes/no questions. I propose, based on evidence from Guayaquil Spanish, that this structure not only exists in embedded CPs as Rizzi shows, but must also exist in sentence initial positions.

**Yes/no question formation in the Spanish of Guayaquil, Ecuador**

The dialect of Spanish spoken in Guayaquil, Ecuador is not an outlier in terms of the different dialects of Spanish. One dialect adjacent to the Spanish found in Guayaquil is sometimes considered unique because of the influence that Quichua (the Ecuadorian dialect of Quechua) has on it.³ The phenomenon under investigation here is the fact that speakers of the dialect found in Guayaquil optionally use a complementizer particle at sentence initial position to form yes/no questions as seen in (3) above repeated here as (6).

³ Some attribute variations in Andean highland Spanish from standard Spanish dialects to have roots in dialectal difference found in Spain (see Penny, 2000 for a discussion on this topic).
(6) ¿Si tiene Miguel una computadora?
If have3rd.sg Miguel a computer?
‘Does Miguel have a computer?’

This phenomenon is interesting because other languages that use complementizer particles in yes/no question formation do not accompany the particle with subject-verb inversion the way that Guayaquil Spanish does.

Northern Sotho, an SVO language, provides an example of non-inverting questions. This example shows that yes/no questions employing complementizer particles do not differ from declarative word order, only that they add question particles at the beginning or end of sentences. The example in (7) shows a yes/no question in Northern Sotho.

(7) Naa Shwahlane o a šoma?
QP PROPNAME SC1 PRES work
‘Does Shwahlane work?’

This question maintains an SVO word order with the addition of a question particle.

The reason that question particles do not usually coincide with inversion is that the verb (which has previously moved into the tense phrase for tense marking) undergoes movement into the complementizer position, thus blocking any type of complementizer particle from showing up in the head of CP. The tree in (8) exemplifies this phenomenon in Spanish using the traditional CP of X’ theory. This is why one would expect Spanish to lack complementizer particles.

4 This example is taken from Zerbian (2006, pg. 263). The SC1 indicates a subject concord.
Within this theoretical framework as it stands, there is no space for a complementizer particle to emerge other than as the specifier of CP. This, however, would not be the best analysis because it would mean proposing that a position that should house a phrase generates a head. X’ theory without an expanded complementizer phrase as Rizzi (1999) proposes, then, cannot account for the data we find in the Spanish of Guayaquil.

(8)

I propose, therefore, that the complementizer particle *si* in Guayaquil Spanish emerges in the INT head of the complementizer system. This analysis allows for the appearance of a complementizer particle along with subject-verb inversion. The tree in (9) shows how *si* here fits into an expanded complementizer system with an INT head.
Upon viewing this analysis, questions may arise regarding the usefulness of having so many null head positions just to account for one word. It is possible that these heads do not exist in every sentence. However, whether or not these heads are always present in every complementizer system is not important to this analysis. I have shown all heads in the complementizer system only to show how *si* would fit into Rizzi’s (1999) hypothesis. Another possible question that I will address is that there is no C head in the
complementizer system. This is because the FIN head has now taken the spot of C in X’ theory. This is also why we see verbal elements that have undergone movement from the inflectional phrase into the finite phrase in the complementizer system. The syntactic tree in (8) serves as an illustration of why verbal elements can be seen in the complementizer system. The verb *tiene* has moved into FIN to satisfy word-order constraints in question formation. The important point here is that a place higher than the C head found in X’ theory (here realized as the FIN head) exists and houses the complementizer question particle *si* in Guayaquil Spanish.

Another reason that such an analysis is necessary is because, according to my informants, using *si* in yes/no question formation without subject-verb inversion as in (10) is not possible.

(10) *¿Si Miguel tiene una computadora?*
    If Miguel have3rd.sg a computer?
    ‘Does Miguel have a computer?’

If this sentence were grammatical, *si* would behave like complementizer particles in other languages, generating in the C head position. Because it is not grammatical, the analysis that utilizes the expanded complementizer system is necessary to account for this phenomenon.

One argument that I will consider here is that analyzing this phenomenon may be possible by following McCloskey’s (2001) Irish question particle analysis discussed above. This analysis would propose that *si* originates in the FIN head and moves to the FORCE head to fulfill a dual role in question formation (communicating force and finiteness) and complete the complementizer system.
Analyzing Guayaquil Spanish question particles in the same manner as McCloskey (2001) would, by necessity, propose that complementizer systems in embedded clauses, also undergo movement unless the FORCE head is otherwise filled by another complementizer, which is possible in Spanish. Suñer (1991) illustrates that embedded clauses in Spanish, including the dialect spoken in Guayaquil, often contain two consecutive complementizers. She states that 'that' and 'if' are found together in embedded indirect questions. The sentence in (11) is an example of this phenomenon.

(11) Le preguntaron [que] [si] su madre la visitaría la semana siguiente.

‘They asked her if her mother would visit her next week.’

This data shows that the complementizer system must be able to accommodate more than one head position in embedded clauses of Spanish. Because two different complementizers can be found together in these sentences and maintaining that the complementizer system in embedded clauses is no different than the system in matrix clauses, we see that 'if' would have to undergo movement in the absence of 'that'.

Although following McCloskey’s (2001) analysis for complementizer particle in Irish is a possible option, retaining the notion that 'if' is generated in the INT head is simpler because it does not involve movement such complex movement in differing circumstances.

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5 This example is taken from Suñer (1991). I changed whether in the original to if in the translation line for consistency. Both words are correct.
Prieto and Rigau (2007) also briefly discuss the syntactic structure that houses the complementizer particle *que* in Catalan. They show *que* residing in the FIN head of the complementizer system. Because their work focuses on the pragmatics involved with intonation and question particles, they overlook the fact that, like Guayaquil Spanish, Catalan demonstrates subject inversion in these yes/no sentences and do not account for why an overt complementizer accompanies subject inversion. This is problematic because in subject inversion, the auxiliary, or main verb in the case of Spanish and Catalan, raises into the complementizer head position as seen in (8). Because of this oversight, Prieto and Rigau’s syntactic analysis cannot properly account for the existence of a complementizer in subject inverted yes/no questions and, again, the retention of the idea of *si* being generated in the INT head is more advantageous.

**Implications**

Because it is necessary to posit a multi-headed complementizer system to account for yes/no question formation in the Spanish spoken in Guayaquil, Ecuador, the syntactic constructions involved in other languages utilizing complementizer particles should be reexamined in order to further test this hypothesis. If this hypothesis holds true, it could be conjectured that other complementizer particles that show up in yes/no questions cross-linguistically reside in the INT head.

Although most researchers that have posited an exploded complementizer system have provided evidence from embedded yes/no question clauses, this analysis provides empirical evidence suggesting that such systems also exist at sentence initial position.
Conclusion

In this paper, I have provided a brief overview of the research involving yes/no question formation and have shown that a complementizer system consisting of various heads that house different complementizer elements is necessary to account for yes/no question formation in one dialect of Spanish. I have argued, in opposition to Prieto and Rigau (2007), that another romance language aside from Catalan does contain the option of utilizing a complementizer particle in yes/no question formation. I have also discussed some implications of my analysis regarding this phenomenon. Future research should test this hypothesis more rigorously. This can be accomplished by investigating the possibility that other languages using complementizer particles can be analyzed as generating complementizer particles evident in yes/no question formation in the INT head of an expanded complementizer system. In addition, data from more informants should be collected to more strongly attest the possibility and optionality of *si* in question formation.

Prieto and Rigau (2007) propose that optional question particles in Catalan are used for pragmatic purposes (namely politeness). The investigation of the possibility that *si* is marking some pragmatic function is important for the complete comprehension of the present phenomena.
References


