Non-discourse-configurationality in Imbabura Kichwa

Chihiro Taguchi & Jefferson Saransig*

Abstract. This study investigates the syntactic structure of Imbabura Kichwa, a Quechuan language spoken in the Imbabura Province of Ecuador, with a focus on the seemingly free word order in grammatical functions and discourse-semantic functions (i.e., topic and focus). We first provide the data and overviews of the non-configurationality and non-discourse-configurationality of Imbabura Kichwa. Then, we demonstrate that the underlying syntactic structure of Imbabura Kichwa is built up hierarchically based on the agreement of focus enclitics with clause types and polarity. Finally, we argue that the non-configurationality and non-discourse-configurationality are the surface realization of the movement from the underlying structure to the daughter positions of a non-projective category S.

Keywords. Imbabura Kichwa; syntax; topic and focus; discourse configurationality

1. Introduction. This study argues that Imbabura Kichwa (ISO 639-3: qvi) is non-configurational not only for grammatical relations (subject, object, and so forth) but also topic and focus arguments (i.e., non-discourse-configurational). Imbabura Kichwa is one of the Quechua II languages spoken in the Imbabura Province of Ecuador. Its canonical word order is SOV but allows for scrambling of arguments as shown in sentences in (1). As such, Imbabura Kichwa is a non-configurational language.

(1) a. SOV
   Inti=ka aycha-ta miku-rka.
   Inti=TOP meat-ACC eat-PST.3
   ‘Inti ate meat.’

b. OSV
   aycha-ta Inti=ka miku-rka.
   meat-ACC Inti=TOP eat-PST.3
   ‘Inti ate meat.’

c. SVO
   Inti=ka miku-rka aycha-ta.
   Inti=TOP eat-PST.3 meat-ACC
   ‘Inti ate meat.’

d. OVS
   aycha-ta miku-rka Inti=ka.
   meat-ACC eat-PST.3 Inti=TOP
   ‘Inti ate meat.’

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1.1. TOPIC AND FOCUS IN IMBABURA KICHWA. In Kichwa, topic and focus are marked morphologically, which are:\footnote{Following Grzech’s (2016; 2020; 2013) analysis on Napo Kichwa, this paper assumes that these topic and focus markers are enclitics. Though it is not straightforward to establish the definition of clitics that is valid cross-linguistically (Haspelmath 2015), it can be said for Imbabura Kichwa that these topic and focus markers are neither affixes nor independent morphemes. First, these topic and focus morphemes can be attached to broader syntactic categories than verbal and nominal inflectional affixes. Second, the topic and focus morphemes can co-occur with verbal and nominal inflectional affixes as seen in (2). Third, the topic and focus morphemes are attached after any verbal and nominal inflectional affixes. Fourth, the topic and focus morphemes can optionally ignore the penultimate accent rule, allowing for both aycha-tá=mi and ayché-ta=mi, for example.}

- Topic marker: =ka
- Focus markers:
  - Affirmative focus: =mi (and its emphatic form =mari)
  - Negative focus: =chu
  - Polar (yes/no) question focus: =chu
  - Open (wh) question focus: =tak
  - Dubitative evidential focus: =cha (and its emphatic form =chari)
  - Inferential evidential focus: =shi

There can be multiple topics in arguments as exemplified in (2a), but only one argument can be morphologically focused (2b).

(2) a. Inti=ka aycha-ta=ka miku-rka.
   \hspace{1cm} Inti=TOP meat-ACC=TOP eat-PST.3
   \hspace{1cm} ‘Inti ate meat.’

b. *Inti=mi aycha-ta=mi miku-rka.
   \hspace{1cm} Inti=FOC.AFF meat-ACC=FOC.AFF eat-PST.3

A focus marker can be attached to a wide variety of syntactic categories: nominals (3a), verbs (3b), adverbials (3c), and negation particles (3d). However, a topic marker can only be attached to nominals and a limited class of adverbials (4).
1.2. SEMANTICS OF TOPIC AND FOCUS IN IMBABURA KICHWA. Topic in Imbabura Kichwa marks particular given information which conveys what the sentence is about. In contrast, focus in Imbabura Kichwa highlights new information that is informative in the discourse. Elements that are neither topicalized nor focused are neutral, having “no particular communicative role” (Kiss 1981). An example of discourse containing topic and focus is shown in (5a-5c), where the topic arguments are marked with a subscript T and an underline, and the focus arguments are bracketed with a subscript F. In (5a), the topic “Inti” is presupposed to be an individual known to both interlocutors, and the interrogative pronoun receives the focus marking to demand new information unknown to the speaker. In (5b), the speaker inherits the topic and provides the requested information about it, marking the latter with the focus morpheme. Then, the speaker of (5b) asks back a question to the hearer, where the demanded information is elided and the hearer is addressed as a contrastive topic. To this, (5c) marks the subject as a topic since it is the given, mutually shared background, and also marks the object as a contrastive topic, while what the

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2 This paper treats this type of topic as contrastive topic, not focus, following Nakagawa’s (2020) analysis of Japanese, which has a similar usage of a topic marker (=wa).
speaker actually ate is marked with the affirmative focus. Note that focus in Imbabura Kichwa does not distinguish identificational (contrastive) focus and information (presentational) focus discussed by Kiss (1998).

(5)  a. Inti=kaT [ima-ta=tak]F miku-rka?
    Inti=TOP  what-ACC=FOC.WHQ  eat-PST.3
    ‘(As for Inti,) what did Inti eat?’

b. pay=kaT [aycha-ta=mi]F miku-rka. kan=kaT?
    3SG=TOP  meat-ACC=FOC.AFF  eat-PST.3  2SG=TOP
    ‘(As for him,) he ate meat. (How about) you?’

c. ˜nuka=kaT aycha-ta=kaT mana miku-rka-ni=chu, [challwa-ta=mi]F
    1SG=TOP  meat-ACC=TOP  not  eat-PST-1SG=FOC.NEG  fish-ACC=FOC.AFF
    miku-rka-ni.
    eat-PST-1SG
    ‘(As for me,) I didn’t eat meat, but I ate fish.’

2. Configurationality and discourse configurationality. Configurationality and discourse configurationality are properties of languages in which grammatical functions and topic–focus functions (discourse-semantic functions (Kiss 1995b)), respectively, are correlated with particular phrase structural positions (Surányi 2015). In other words, configurational languages mark grammatical relations by word order, and non-configurational languages mark them by other means, having rather free ordering of a predicate and its arguments. Similarly, discourse-configurational languages express topic and focus by a specific word order, while non-discourse-configurational languages are independent of a specific structural position. For example, (Kiss 1981:p. 187) describes that Hungarian has four syntactic positions that determine discourse-semantic functions as summarized in (6). The complement in position (i), the leftmost position in the clause, is topicalized; position (ii), the preverbal position, bears a prosodic markedness with a high-fall pitch and marks the focus of the clause when filled; position (iii) serves as the position for the verb; and, lastly, the complements occupying position (iv), the postverbal elements, are neither topicalized nor focused, functioning as neutral elements in terms of discourse-semantic functions.

(6)  a. Marit(i)  János(ii) szereti(iii) ____ (iv).
    Mary.ACC  John  loves
    ‘As for Mary, it is John who loves Mary.’ (Topic: Mary, Focus: John, Neutral: none)

b. ____ (i)  János(ii) szereti(iii) Marit(iv).
    John  loves  Mary.ACC
    ‘It is John who loves Mary.’ (Topic: none, Focus: John, Neutral: Mary)

Configurationality and discourse configurationality are mutually independent properties; a language can be both configurational and discourse-configurational, and a language can also be both non-configurational and non-discourse-configurational. Therefore, we can think of four possible typological categories of (discourse-)configurationality: (i) configurational and discourse-configurational, (ii) non-configurational and discourse-configurational, (iii) configurational and
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<th>Discourse-configurational</th>
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<td>Catalan</td>
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<td>Somali, Basque, Hungarian, Finnish, Korean, Southern Quechua</td>
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non-discourse-configurational, (iv) non-configurational and non-discourse-configurational. The work in Kiss (1995b) extensively discusses discourse-configurational languages from a cross-linguistic perspective, and the languages discussed in the work can be categorized as in Table 1. Provided that topic and focus arguments in Imbabura Kichwa are primarily marked by morphology rather than word order as seen in the data so far, we classify Imbabura Kichwa in the fourth category.

In particular, in relation to our present study on Imbabura Kichwa, Muysken (1995) proposes that certain Southern Quechuan varieties have a D-structure shown in (8) for example sentence (7).3 The analysis proposes that, at the S-structure, the focused NP *Qusqu-man* ‘to Cuzco’ is moved to Spec,NFP, realizing as *Qusqu-man-chu*, and the direct evidential (DE) *-mil-n* is attached to *mana* as an enclitic in the phonological realization. This analysis claims that the evidentials, which mark focused or rhematized arguments, are structurally marked in Southern Quechua’s syntax, and therefore Southern Quechua is discourse-configurational in terms of focus marking.

(7) mana-n Qusqu-man-chu ri-ni.
    not-DE Cuzco-DAT-NEG go-PRS.1SG

‘It is not to Cuzco that I go (but somewhere else).’

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3 EvP stands for an evidential phrase and NFP for a negative focus phrase.
However, this analysis does not hold for Imbabura Kichwa. First, Imbabura Kichwa has a conflated system of evidential and focus, and the affirmative focus =mi (direct evidential in Southern Quechua) and the negative focus =chu cannot co-occur in a finite clause, because it violates the rule described in (2b). Second, the negative focus =chu in Kichwa can only be attached to the predicate. Therefore, the literally translated counterpart in (9a) is ungrammatical. In order to translate the Southern Quechua sentence in (7), one must use the default negative sentence in (9b) instead or to use a periphrastic focus where the focused NP is fronted out of the negated VP (mana ri-ni) and is marked by the affirmative focus enclitic =mi as in (9c). For this reason, it is necessary to provide a different account for the (non-)configurationalities of Imbabura Kichwa. In the following section, we investigate the topic/focus marking in Imbabura Kichwa syntax in depth.

(9) a. *mana=mi Kusku-man=chu ri-ni.
   not=AFF.FOC Cuzco-DAT=NEG.FOC go-PRS.1SG
   Intended: ‘It is not to Cuzco that I go.’

b. mana Kusku-man ri-ni=chu.
   not Cuzco-DAT go-PRS.1SG=NEG.FOC
   ‘I do not go to Cuzco.’

c. Kusku-man=mi mana ri-ni.
   Cuzco-DAT=AFF.FOC not go-PRS.1SG
   ‘It is not to Cuzco that I go.’

4 The only exception is the copula ka-, where the negative focus =chu can be attached to either the copula or the complement.
3. Syntactic structure of Imbabura Kichwa. As described in Section 1.1, the permuted orders of a predicate and its arguments in Imbabura Kichwa are grammatical. However, several constraints make certain permutations disallowed.

(10) a. The negative particle *mana* must precede the negated predicate.
    b. The negative focus enclitic =*chu* must be attached to the predicate.
    c. The focus enclitics must precede the predicate.
    d. When focusing an NP in a negative clause, the NP must precede the negative particle *mana* and =*mi* (affirmative focus) is used as the focus enclitic.

To account for the seemingly free word order of Imbabura Kichwa, we start with building an analysis based on the framework of Minimalist syntax. We assume that the agent of a predicate is generated at Spec,vP, and the theme at Spec,VP. T₀ has a tense feature and an uninterpretable feature [uϕ] valued by the agreement with Spec,vP on the person and number features. Based on these assumptions, a simple sentence in (11) has a structure shown in (12).

(11) Inti aycha-ta miku-rka.
    Inti meat-ACC eat-PST.3
    ‘Inti ate meat.’

(12)

Since the focus markers in Imbabura Kichwa typically is typically tied to clause types (declarative, interrogative, etc.), we assume that C agrees with the c-commanded NP with the focus feature. For example, in (13), the focused NP with the polar interrogative enclitic =*chu* is the result of the agreement with C having the polar interrogative feature [POLQ]. The structure of (13) is shown in (14).

(13) aycha-ta=chu Inti miku-rka?
    Inti meat-ACC=POLQ.FOC eat-PST.3
    ‘Inti did not eat meat.’
The unvalued feature \([u\{FOC|NEG\}]\) means that the probe looks for either \([FOC]\) or \([NEG]\), and the search halts when either of them is found and is copied to the probe. The motivation to assume this agreement is to account for the fact that the negative focus enclitic must be attached to the predicate. Under this assumption, the search finds \([NEG]\) before it reaches \([FOC]\), and no NP can be focused by =chu.

(15) mana Inti aycha-ta miku-rka=chu.
    not Inti meat-ACC eat-PST.3=NEG.FOC
    ‘Inti did not eat meat.’

(16)
This also correctly predicts the realization of the polar interrogative focus enclitic \textit{=chu} with the negation particle \textit{mana}. In this case, \textit{mana} can be focused by attaching \textit{=chu}, because the search finds \textit{mana} first before it reaches Neg$^0$.

(17) \textit{mana=chu} \quad \text{Inti} \quad \text{aycha-ta} \quad \text{miku-rka?}
\quad \text{not=POLQ.FOC} \quad \text{Inti} \quad \text{meat-ACC} \quad \text{eat-PST.3=NEG.FOC}
\quad \text{‘Didn’t Inti eat meat?’}

(18)

Finally, we need to account for the rule shown in (10d). For this, we assume a FocP between CP and TP that overrides the agreement by C. Foc$^0$ has the unvalued feature \{uFOC\}, and the probe finds the NP with a \{FOC\} feature before the search by C. This agreement attracts the focused NP out of vP to Spec,FocP. Then, when the probe of C looks for either \{FOC\} or \{NEG\}, it immediately finds the former in Spec,FocP and halts the search before it finds \{NEG\}. These steps explain why the focused NP must precede the negation particle \textit{mana} and why the affirmative focus \textit{=mi} is used and not the negative focus \textit{=chu}. Thus, the full structure of (19) is represented as (20).

(19) \textit{aycha-ta=mi} \quad \text{mana} \quad \text{Inti} \quad \text{miku-rka.}
\quad \text{meat-ACC=AFF.FOC} \quad \text{NEG} \quad \text{Inti} \quad \text{eat-PST.3=NEG.FOC}
\quad \text{‘It is meat that Inti did not eat.’}
4. Scrambling in Imbabura Kichwa. We have provided a preliminary analysis of the hypothetical syntactic structure of Imbabura Kichwa that satisfies the rules described in (10). At this point, however, it does not account for the variations in the word order of Imbabura Kichwa. In the following subsections, we discuss three approaches to analyze the scrambling of Imbabura Kichwa and argue that clauses are generated hierarchically and constituents are scrambled under the topmost non-projective category S.

4.1. Adjunction. One way to account for the scrambling in Imbabura Kichwa is to assume that scrambled elements are adjuncts to a higher layer, as proposed by Saito (1992) for A'-movement in Japanese long-distance scrambling. Because we have proposed that the projection hierarchy in Imbabura Kichwa syntax is C > Foc > T, it is tentatively assumed that the adjunction occurs at CP, while scrambling is explained as TP-adjunction in Saito’s (1992) work. A motivation to employ this analysis also stems from the fact that Imbabura Kichwa allows long-distance scrambling as shown in (21).
(21)  aycha-ta=mi, [Sara=ka [Inti t, miku-rka] yuya-n].
      meat-ACC=AFF.FOC Sara=TOP Inti eat-PST.3 think-PRS.3

   ‘Sara thinks that Inti ate meat.’

In this approach, the scrambled sentence in (22) can be represented as the structure in (23). However, a significant difference from Japanese syntax is that unfocused NPs can be moved to the right of the main predicate, whereas written Japanese is strictly verb-final. Therefore, to apply this approach to Imbabura Kichwa syntax, we must further assume that NPs can be adjuncts to CP from both directions. In addition, since discourse-semantic functions (topic and focus) are primarily expressed morphologically in Imbabura Kichwa, it is less straightforward to account for Imbabura Kichwa scrambling purely by syntactic position such as left-periphery.

(22)  aycha-ta=mi mana miku-rka Inti=ka.
      meat-ACC=AFF.FOC not eat-PST.3 Inti=TOP

   ‘It is meat that Inti did not eat.’

(23)

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(23)  CP
     /\           \
    /  \         /  \\
   CP   CP         CP
     /  \\      /  \\
    /    C'     /    C
   /      FocP   /      Foc'
  /        /      /        /  \\
 mana   aycha-ta=mi  Foc'          Foc  TP
        /       /    /            /  \\
 mana Inti aycha-ta miku-
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4.2. Dual Structure Hypothesis. Another way to account for the non-(discourse-)configurationality in Imbabura Kichwa is to employ the Dual Structure Hypothesis which has been proposed to account for the variation of word order in non-configurational languages (Simpson 1983; Austin & Bresnan 1996). This hypothesis has been a theoretical backbone of non-transformational grammar frameworks such as Lexical Functional Grammar. In this approach, we can assume the phrase structure rule that allows multiple branching under S, as formulated in (24). The Kleene star denotes that the expression can be repeated zero or more times, and the superscript 1 denotes that the expression can only be used once in the position.
Based on the non-configurational phrase structure rule, the c- and the f-structures for sentence (22) are demonstrated in (25) and (26), respectively. Here, we assume that topic and focus are valued by their attributes TOPIC and FOCUS, respectively, unlike by DIS(located) proposed in (Belyaev 2023:p. 143). We also assume that the negation is introduced as a value of the ADJunct attribute, following the proposal by Przepiórkowski & Patejk (2015) for Polish, considering that the negation particle mana can also be focused in Imbabura Kichwa.

However, this preliminary analysis is still unable to explain why attaching the negative focus =chu to the focused NP is ungrammatical in (27) as mentioned in (10b), unless a certain morphological rule that prohibits the combination is assumed.

4.3. HYBRID APPROACH: HIERARCHICAL GENERATION AND NON-PROJECTIVE CATEGORY. Given that (i) it is less straightforward to advocate for a hierarchical structure in Imbabura Kichwa scrambling and (ii) non-transformational account seems to fail to account for some grammatical restrictions, we provide an alternative analysis with a hybrid approach that Imbabura Kichwa syntax builds up a hierarchical structure first, on top of which lies a non-projective category S that allows multiple branching. Taking the syntactic structure up to CP that we discussed in Section 3, the scrambled sentence in (22) can be represented as in (28).
A flat structure in the context of discourse configurationality has been discussed by Kiss (2008) for Hungarian. It argues that the syntactic structure of Hungarian, a non-configurational language, is constructed hierarchically; however, the VP domain “collapses” into a flat structure once the verbal head is extracted out of the VP into a functional head position, resulting in the free word order. Similarly, Imbabura Kichwa syntax has a flat structure over CP to which NPs and certain adverbial phrases can be extracted. Unlike Hungarian, Imbabura Kichwa marks topic/focus not by specific syntactic positions but by morphemes. For this reason, any NPs, certain adverbials, and the negative particle can be moved to the daughter positions of S as long as the movement does not violate the rules described in (10); in other words:

\[(29)\]
\[
\begin{align*}
a. & \quad \text{the focused phrases cannot move to the right of CP under S,} \\
b. & \quad \text{the negation particle } mana \text{ cannot move to the right of CP under S, and} \\
c. & \quad \text{the negation particle } mana \text{ cannot cross over } [\text{FOC}].
\end{align*}
\]

5. Concluding remarks. This study provided an explanation for the free word order in Imbabura Kichwa. It first provided data confirming that scrambling in Imbabura Kichwa is independent of both grammatical relations and discourse-semantic functions. This sheds light on a typological category of non-configurational and non-discourse-configurational languages. The syntactic analysis in Section 3 argued that the base syntactic structure of Imbabura Kichwa is built up hierarchically. This enables us to explain the distribution of focus-marking by the operation of Agree. In particular, the hierarchical structure correctly predicts the seemingly contradictory restrictions of the polarity and clause-type agreement of the focus enclitics. On top of the hierarchical structure up to CP, we further argued that the Imbabura Kichwa syntax has the non-projective category S that allows the permutation of word order. This hybrid approach overcomes the limitations of both the strictly binary-branching hierarchical structure and fully relying on the Dual Structure Hypothesis.

However, there are still several remaining questions in this analysis. At the end of the analysis in Section 4.3, we had to resort to the seemingly ad-hoc rules listed in (29) to account for the word order under S. It is still unknown in Imbabura Kichwa whether these are constrained by S,
constrained by some phrase structure rules, or the CP selects what can move up under S in which direction. These issues are left for future work.

References


