Understanding Wh-Movement in Tiv: What Moves Why and To Where

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Abstract

Movement is a complex syntactic process whose properties have been elucidated for over half a century of formal syntactic studies. Nevertheless, the phenomenon of movement has continued to intrigue scholars particularly because of the varying asymmetries that exist across languages. This paper sets out to examine syntactic movement in the Tiv language, with particular focus on identifying syntactic units that move, their motivations as well as their landing sites. Specifically, the paper's main goal is to determine asymmetrical variations in the selected language. The takeoff point is Chomsky's Principles and Parameter theory. The paper examines samples of whquestion constructions with the view to note the shared/common features (principles) and the interlinguistic variation (parameters) as stipulated by UG. The analysis shows evidence of movement of wh-elements from structural positions within the IP to the Spec-CP field of a matrix clause. The findings also reveal that preposed Qws also pied-pipe adjunct prepositions. The result also shows that wh-movement in Tiv is triggered by a [+focus] feature rather than a [+wh] feature as is the case with most wh-movement languages. The analyses suggest that the landing site of permutated wh-elements is correspondingly a [+focus] position within the Spec-CP field. The paper recommended that the complementiser domain in Tiv be explored further in relation to understanding functional projections in the language.

Keywords: Tiv language, movement, wh-questions, PPT

Introduction

One linguistic mechanism that has occupied the minds of linguists and psycholinguists alike is the nature and manner of syntactic movement in natural languages. A substantial body of research has shown the ability of natural language syntax to move grammatical constituents from one position to another and empirical evidence has shown that movement is universal. The universality of syntactic movement has given scholars the sufficient cause to continually search knowledge about the nature and manner of its operations in natural languages. Interest in movement operation in language has also persisted because of the asymmetries, intricacies and the multidimensional nature of the issues surrounding its operation. Another reason for the sustained interest in movement has been the fact that its study offers useful sources of evidence about the nature and relationship between language, the human mind and the brain.

Movement is a syntactic mechanism that involves the permutation of grammatical elements from one structural position to another. Pesetsky (2000) describes movement as a situation in which a syntactic unit appears to occupy more than one position in a syntactic structure. Carnie (2006) defines movement as a process in which elements are moved from position where they receive important features of interpretation.

Different types of movement have been identified and classification is based on two main criteria: the type of element(s) that move; phrases or phrasal-heads (dominators of phrases), and the position to which an element moves. While phrases ordinarily move to argument positions typically known as 'argument movement', or 'A-movement', phrases may also move higher up to 'non-argument positions' characteristically known as 'A-bar movement', or 'Wh

movement'. This paper is concerned with the latter type of movement which is wh-movement. Wh-movement refers to the unbounded movement of a target constituent from its original position within a minimal sentence (IP) to an empty position outside the minimal sentence (Spec, CP) in order to check its inherent or received features. This movement typically involves the permutation of wh-question words such as *who*, *what*, *when*, *where*, *how which* etc or their equivalents out of their logical structural positions. Structurally, this movement is seen to be unbounded because like Ndimele (1992) rightly observes, there seem to be no limit to the number of cyclic movement leaps it can take while in transit. Wh-questions also known as content question are question types that require more information than their Yes/No counterpart. They are so-called because they involve the use of QWs that begin with the wh-grapheme *wh* in English.

The general hypothesis surrounding wh-movement is that it must be motivated. In other words, movement does not just take place; it must be triggered albeit by different features. Also ,that there must be an existing landing site for moved elements otherwise the structure will crash. Nevertheless, asymmetries exist in the types of constituents affected, in what happens to the extraction sites where elements are extracted as well as the landing sites and in the kind of constraints that movement may experience in a language. The paper therefore is an attempt to understand the extent to which wh-movement in Tiv conforms or negates some of these universal propositions.

Theoretical Framework

This paper is anchored on the Principles and Parameters Theory (PPT) of Chomsky (1981). Principles and parameters is a theory in the generative grammar paradigm in which the syntax of a natural language is described in accordance with universal principles and some language particular parameters. The theory aims to develop an explanatory account of Universal Grammar. The PPT builds on two key concepts; a set of principles that are common to all languages; and a set of parameters along which languages differ. The main goal of the PPT is to identify and set syntactic structures into series of principles that are universal to human language and by this, explain the universal traits that characterize all human languages and, to identify areas of variations among languages known as 'parameters'. Bbased on the available records, wh-movement has rarely received attention in the language. Furthermore, the choice of this theory is inspired by the fact that Principles and Parameters theory is a framework which is specifically built to accommodate the idiosyncrasies of individual languages (Amfani 1996). The theory thus gives room for the study of even less studied languages like Tiv and avails such languages the opportunity to contribute to universal propositions about languages. By the adoption of the theory, this study hopes to bring to light some language particular structures and properties of this little studied language in relation to universal principles. It is our contention that Universal Grammar can assume true universality if empirical evidence from more languages are provided or exposed.

Data presentation and Analysis Wh-question words (QW) and phrases in Tiv

The lexical items or phrases that function as wh-question words in the Tiv language include; an(-a) who, nyi what, han (-na) where, nan/nena how, u/i/a/m-me how many u/i/a/ki/ma-an(a) for who/whose? (Sgl), (m). $u-n\hat{o}$, for who/whose? (pl) and Hanmo/ma 'which'. Hanmo/ma can combine with some generic nominals to form Q-phrases such as hanmà-shie 'which time',

hanmà-*jiir* 'which place', hanmà-*yange* which day', hanmà-**or** which man/person, Hanmà-**kwase** which woman etc. Other Q-phrasess include (*sha*) *ci-u nyi* 'for what reason/why', (*sha*) *ci-u an* 'for who' and nan which is usually preceded by a causative verb *er* to derive *er-nan* 'do-how' / 'why', or its variant *hii-nan* 'begin-how' or 'why'

Wh-questions in Tiv

For wh-question, the Tiv language has two forms; question in which the wh-QW appears in its logical position (1a); and the type in which the wh-QW appears in Spec-CP a position far away from its base-generated position (1b). While the former are instances of in-situ wh-question, in the later are instances of wh-movement. The assumption is that in the later types, the wh-QW has moved from its based-generated position to arrive at the SpecCP. Consider (1a&b);

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(1)a. Iorjà a gbídí án?
Iorja SP beat who 'Who did Iorja beat?'
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As can be observed from examples (1a&b) the wh-QWs in (1a) is in base-generated position as the object of the verb gbidye 'beat'. However, in (1b) the wh-QWs is not in its logical object positions after the verb. Rather, the QW has moved out of its base-generated positions within the IP to the Spec-CP positions in the sentence. The verb Nyumu – 'bite' in (1b) for example logically requires an NP object, but the wh-phrase representing this object (marked in bold) is nowhere near the verb. It has appeared far higher into the structure, i.e., in the complementiser field to the left of the Spec-IP position. For discursive purposes, examples (1b) can be explained as being derived via movement of the wh-QWs from its base-generated positions within the IP to the spec-position of the CP. Consider the schema in (2) below.

A careful observation of the schema above reveals that the wh-word in (2b) originated from a position within the IP in its D-structure but through movement it has ended up in the sentence-initial positions outside the IP as the arrow indicates. This is in consonance with Radford's (1988:446) position that the pre-sentence S-structure position of wh-words can be argued to have originated from either the object, subject or complement position of the minimal sentence IP in the D-structure.

These evidences raise some important questions: (i) **what** are the elements that undergo movement in wh-questions in the language? (ii) if wh-questions can be questioned in-situ in the language why does the language adopt the movement strategy? In other words, what triggers wh-movement in Tiv given that questions can be formed with the in-situ strategy? (iii) Lastly, where does moved wh-QW land? In other words what is their landing site? These are the three basic questions this paper seeks to answer. But, before we delve into that, it's important we take a cursory look at the properties of wh-movement in Tiv.

The properties of wh-questions

An examination of the syntax and properties of wh-questions will reveal among other things the elements that undergo movement, their motivation as well as their landing sites. Generally, wh-questions in Tiv as stated above have two basic structure types: the in-situ and the wh-movement. The in-situ structure has quite a simple structure that does not need much analysis but a brief comment is necessary. With the in-situ strategy there is no movement; syntactic elements are questioned in their base-generated positions. That is, Wh-questions generated with the in-situ strategy maintain the basic SVO structure with no significant transformation;

- (3)a. Kwase wou ngù eren lùam declarative Wife your is doing food 'Your wife is cooking food'
 - b. Kwase wou ngù eren **nyí**? interrogative Wife your is doing what 'What is your wife doing?'

In (3b) which is the interrogative variant of the declarative, the subject NP kwase wou 'your wife' is still in the subject position. Similarly, the verb and object eren-'doing' and nyi 'what' both appear in their logical predicate and complement positions respectively. The object, lùam 'food'in (3a) is simply replaced with the wh-word nyi 'what' in (3b) to change the structure from a declarative to an interrogative. There is no evidence of permutation. It is important to state that the structure analysed here is used to question both objects and adjuncts but cannot be used to question subjects (3c) and reason er-nan 'why' (3d). This in-situ structure cannot be utilised to question a subject of a sentence;

- c. *An nan yav-ěn sha yough? Who SP sleep-ing in room
- d. ???* Ù zà makeranta ga ēr-nan?
 You-SG go school not that why
- e. *Nàn yav-èn sha yough án? SP sleep-ing in room who

This subject-object asymmetry is a parametric property of the Tiv language. The language does not allow subject to be questioned in Spec-IP, i.e., in-situ. The explanation for why subjects cannot be question in-situ in Tiv is simply to avoid a functional clash. Subjects in Tiv are already in a functional (topic) position in the CP-field, so questioning them in that position will lead to a clash of interpretation hence their movement to a higher structural position. This position has been earlier resonated by Postal (1998) and Takahashi (2010) who have argued that the sentential subjects are topics and that something else occupies the SpecIP positions.

The next structure worthy of mention is that of wh-questions involving permutations. The distributional properties for wh-questions generated through movement follows a systemic structure. Structurally, they involve movement of the wh-phrase to the question initial position leaving the verb stranded sentence finally.

(5) Ká nyí_i Iorpàndè a yâm _e_i?
Foc what Iorpande SP buy 'What did buy Iorpande'

The verb Yam 'buy' typically subcategorises for an object, but in (5), the object which should be adjacent to the verb has been moved to a higher structural position in the sentence leaving the verb stranded. The empty space co-indexed with the moved QW Nyi 'what' and its

present supports the fact that movement has occurred. Thus one can argue that the Tiv language employs both the in-situ and the wh-movement strategies in wh-question constructions.

Wh-questions in Tiv derived through movement have a relative-like structure. First, the fronted wh-phrase behaves like the relativised subject and the agreement marker or resumptive pronoun (RP) expresses agreement and relativisation with the fronted wh-QW. Wh-questions in Tiv are realised as wh-clefts with the following structure;

Focus-marker + wh-QW + a relative-like Agr + a complete sentence.

With this structure, the wh-phrase appears in the clause initial position adjacent to a focus marker *ka* which obligatorily precedes the moved QW as illustrated in (6a&b);

- (6)a Ká -áni Msughter a n-e **nán**i bùa la? Foc who Msughter SP give-Pst RP cow that Who did Msughter give that cow to?'
 - b. Ká -án_i nán_i nè Msughter bùa la?
 Foc who RP gave Msughter cow that 'Who gave Msughter that that cow?'
 - * Áni náni nè Msughter bùa la?
 Foc who RP gave Msughter cow that 'Who gave Msughter that that cow?'

Movement of the wh-phrase without the focus marker renders the construction ungrammatical in Tiv as shown in (6c). The fact that the focus marker is an essential part of this construction attests to the fact that it is a significant part of the construction. Accordingly, the insertion of the focus marker in the Spec-CP position without the wh-phrase equally renders the structure ungrammatical too as the ungrammaticality of (6c) shows.

The next significant aspect of this structure worthy of note is the fact that movement of the wh-phrase triggers the insertion of a resumptive pronoun (RP) such as shown in (6a&b) above (marked in bold). Movement of a wh-phrase from the object and subject positions in (6a&b) respectively triggers the insertion of a resumptive element to fill the extraction site. The question is how do these resumptive elements interact with the process which creates them? The general assumption is that resumptive elements fill the gaps that would have otherwise been created by extraction and they enter into an anaphoric binding relation with the extracted elements which serve as their antecedents. This observation set the scene for one more question. Why are they necessary? Theire-function is to ameliorate reconstructions. Reconstruction is the phenomenon in syntax whereby a moved phrase exhibits properties that are attributable to a syntactic position other than the one in which it is pronounced Chomsky (1977).

Equally noteworthy is the fact that while movement in languages like English leaves only empty traces, movement in Tiv leaves either a filled pronominal or an unfilled (empty) traces.

- (7)a. Ká-án_i Iorjà a gbídí *nàn*_i? Foc-who Iorja SP beat RP 'Who did Iorja beat?'
 - b. Ká-hán_i Mwuēsè a zé e_i? Foc-where Mwuese SP goPST 'Where did Mwuese go to?'

Example (7a) shows that movement of the object-NP has triggered the insertion of an overt trace in the form of a pronominal element *nan* while, in (7b), the extraction site is left empty as illustrated with the underscore and the 'e' which is co-indexed with the moved-NP.

One long standing property of RP is that they enter into a binding relation that amnesty island effects. This property has been identified at least since the work of Ross (1967). In other words, resumptive pronouns help to ameliorate the effects of general constraints on movement as illustrated below. In all cases the resumptive pronoun appear in bold

- (8)a. [CP Ká- án Mwuēsè a tunà [NP ibaver [CP ì i kaa er **nán**i mar yough ken ayange ahar la? Foc-who Mwuese SP deny news which it say that RP build house in days two that Who did Mwuese deny the news that he/she built a house in two days?
 - b. Ká hánmá kon; u nenge a or u nán gber u; sha ate pepe? Foc which tree you see O-Agr man assoc him cut it in ate morning Which tree did you see the man who cut it?
 - c. Ká-áni Mwuēsè a soo ù fan shin nàni- a lu zá temàn tebùu sha Gboko nyian yô? Foc who Mwuese SP want to know whether RP- SP-be-go sit-ing table in Gboko today Who does Mwuese want to know whether he will be taking Holy Communion today?

Examples (8a,b&c) show that the RP have helped amnesty Complex NPs, Relative clause and Wh-Island constraints respectively.

Another significant cornerstone for this paper is determining the elements that undergo movement. Largely, arguments and adjunct wh-elements maybe questioned and as such both undergo wh-movement. However, wh-movement in Tiv may take along other elements such as prepositions. Consider (8d-e)

- d. U ngu seven mo ikyuleke sha ci-u nyi You are harvesting my maize because of what 'Why are you harvesting my maize?'
- e.. Ka sha ci-u nyi u lu seven mo ikyulele Foc because of what you be harvesting my maize 'Why are you harvesting my maize?'

Example (8d&e) shows that the Qw *nyi* in (D) has been pied-piped alongside the preposition heading the projection. This shows that in wh-movement in Tiv, aside from the wh-Qws other elements may also be extracted along.

One more notable property of the structure of the wh-question worth mentioning is the role of prosodic features. There is systemic tone variation that differentiates wh-questions generated via movement from their declarative counterparts. Similar conditions have been identified in languages such as Hausa (Amfani 2007) and Igbo (Mbah 2006). One major feature observed in Tiv is a high tone focus marker (FM) adjoined to the moved wh-phrase focusing the questioned phrase. This high tone has an associative effect on both the subject pronoun (SP) and the main verb. Consider example (9). (9a&10a) are the underlying sentences while (9b&10b) are the wh-questions involving movement.

- (9)a. Iorjà gbidyè wan nà Iorja beat son his 'Iorja beat his son'
 - b. Ká-áni Iorjà a gbidyé-n nani? Foc-who Iorja SP beat-ing RP 'Who is Iorja beating?'
- (10)a Mwuēsè zà kasùa Mwuese go market 'Mwuese has gone to the market'

b. Ká-hán_i Mwuēsè a zá-n? Foc-where Mwuese SP go-ing 'Where is Mwuese go-ing to?'

Note that, the high tone on the FM patterns the high tone on the inserted SP. The SP carries the high tone that ensures the interrogative reading. The fact is that with the SP, the lexical subject NP can be deleted and the sentences will retain its grammaticality. On the other hand, if the tone of the SP is changed to a low tone, the sentence losses its interrogative force and can no longer be accepted as such. Suffice it to also mention that the tone pattern of mono-syllabic and disyllabic verbs in Tiv is usually L and HL respectively. However, when the wh-movement strategy is used for questioning, the tone pattern changes to H and HH for mono-syllabic and disyllabic verbs respectively. Having discussed the movement effects displayed in the Tiv language, it is necessary to examine why movement occurs, that is, what triggers movement in the language.

Triggers for wh-movement in Tiv

The central idea behind the notion of triggers in movement is the recognition of the fact that all syntactic movements are triggered. Nevertheless, there is yet no consensus as to what triggers wh-movement in languages. While some scholars (Radford 1988 etc), argue that wh-movement is triggered by the desire to take scope [+wh], others maintain that movement of wh-words is to type a clause as an interrogative (Cheng 1991). Yet other scholars maintain that not all wh-movements are motivated by the same principles (Sabel 2003, Wasike 2007). One of the cornerstone of this paper is to determine what triggers wh-movement in Tiv.

As noted in section 2.3, there is a close interaction between focus construction and wh-movement construction in Tiv. This close affinity is revealing. It portends that wh-movement in Tiv like focus constructions are driven by a [+focus] feature. Evidence to support this comes from the fact that, the focus marker is an essential part of this construction. Consider (6c) repeated here as (11) for ease of reference;

(11) * Án_i nán_i nè Msughter bùa la? Foc who RP gave Msughter cow that 'Who gave Msughter that that cow?.

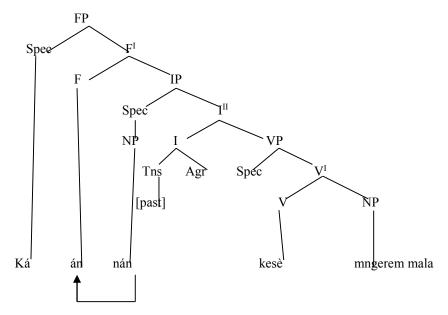
Movement of the wh-phrase without the focus marker renders the construction ungrammatical. The ungrammaticality of (11) stems from the fact that the focus marker ka is missing attesting to the fact that it determines the character of the construction. This supports the fact that wh-movement in Tiv is driven by a [+focus] feature. This claim is consistent with Sabel's (2003) proposition that languages that move wh-phrases to a C-related position for reasons other than to check [+wh] features commonly target the FocP. In other words, wh-movement in such languages are triggered by the [+focus] features and so intrisically, they target a [+foc] position.

Furthermore, the types of answers that are acceptable for these wh-question types are cleft responses which help determine which words represent the focused element of a proposition. Consider the following data where the (a) examples are the question, whiles the (b) counterparts are the responses to the questions. In each example, the focused part is underlined:

- (12)a. <u>Ká hánmô abeda</u> ú sóó? Foc which wrapper you like 'Which wrapper do you like?'
 - b. <u>Ká abeda u nyian la</u> M sóó ye Foc wrapper AM red that I like PRT It is that red wrapper that I like'

- (13)a. Ká án nán kesé ringerem mala? Foc who RP fetch water that 'Who fetched that water?'
- b. Ká wan wou a kesè mngerem mala ye
 foc child your SP fetch water that PRT 'It is your child that fetched that water'
 In (13a), the object of the desire verb *soo* 'like' has been moved from its logical post verbal position to a focal position in the left periphery yielding a cleft-like structure. In (13a), it is the subject of the sentence that has been extracted from its logical subject position to a higher position within the CP-field. This structure is represented with the tree diagram in figure (1);

Figure (1) Ká án nán kesé mngerem mala?



A further comparison of the structure of wh-questions in Tiv with focus construction in the language shows that all the aforementioned properties of focus constructions except for the emphatic marker ye can be identified in wh-questions. For example, there is movement of an NP from its base-generated position to left periphery. In addition, both the preposed NPs in focus construction and preposed wh-phrases in wh-question formation are preceded by the focus particle Ka. Also, both structures show a close semantic relationship in the sense that the focus markers in both structures give an emphatic reading to both events. In other words, there is always a realisation of a focus projection in the relationship that holds between the focused part and the embedded clause. Moreso, in both focus and wh-question constructions, the structures have more to do with focusing or emphasis than anything else. Lastly, because the Post Verbal Area (PVA) is arguable not a focus position in the language, wh-phrased prefixed with a focus marker in the PVA are judged odd or marginally accepted by native speakers as indicated by the double question mark.

(14) ??Anywa a nyuma Ká -án?

(dog Agr bite Foc -who RP) 'Who did the dog bite?'

Following from the discussion above, the paper summits that displacement of wh-phrases in Tiv is driven by the need to achieve focus/emphasis.

Landing Site for Wh-movement in Tiv

The last question to be addressed here concerns where moved wh-QWs go to. That is their landing sites. One prevalent characteristic of all movement rules is the fact that they specify the landing sites, which is the position into which the target constituents move into. It has long been observed in the literature Chomsky (1977), Huang (1982), Rizzi (1997), Cinque (1990) and Postal (1998) among others that different types of movements target particular landing sites. The current assumption under Minimalism is that there is a structural relation between a probe and a goal. An element moves if and only if there is a probe with an uninterpretable feature and there is a unit in the structure that has matching features. The target constituent becomes the goal of attraction. For instance, Chomsky (2000) suggests that wh-movement is triggered by an unintrpretable Q-feature on the functional C-head. The wh-phrase has the interpretable Q-feature and the movement of the wh-element to C is driven by the need to check such features. In other words movement is purely determined by the structural relation between the probe and the goal. Intrinsically, landing sites are also determined by this relation. An element moves to a specifier position of a probe. When a probe is in the IP position, naturally the landing site will be the Spec of IP. On the other hand if the probe is a functional category in the CP-field, the landing site of the target constituent must be the Spec of that category.

One indicator of the landing position of wh-phrases in Tiv can be found in the rule of subject wh-questions. As earlier stated, subjects in Tiv are not questioned in their logical subject position, rather they can only be questioned in a derived left-detached position which appears to in the Spec of the CP as illustrated by example (13) below

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Iorvenda gbongor ityough - declarative
Iorvenda shave head 'Iorvenda shaved his hair'

b. [CP Ká án [IP nán gbongor we ityough]] - interrogative
Foc who RP shave-you head 'Who shaved your hair?'
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In example (15), the subject has moved from its logical subject position within the IP into the CP functional domain necessitating the insertion of the resumptive pronoun in the extraction site. This fact suggests that the landing site for wh-phrases in Tiv is the CP-domain just as it is the case with languages such as English. Extraction of objects and adjuncts likewise move outside the minimal sentence to the CP-domain. However, the structural landing position of the two languages (English and Tiv) within the CP-domain differs. Extracted wh-QWs in the Tiv language target the CP-domain but not the Spec of CP as is the case with languages like English. Rather, it targets the Spec of the Focus phrase which is structurally lower than the Spec-CP. This explains the presence of the focus marker which precedes the wh-QW. This also supports Rizzi (1997) assertion that the CP-domain is a prolific domain housing many functional heads. Rizzi (1997) argues that the CP like the IP can be split into several projections (ForceP, TopP, FocP, and FinP). Movement of the wh-QW in Tiv is therefore into the FocP. Further proof for this comes from our argument above that movement of the wh-QW is triggered by a focus feature. Correspondingly therefore, the landing sites of the wh-Qw can only be the Spec position of the

focus-phrase otherwise the uniterpretable feature in the focus phrase will not be valued and so the derivation will crash.

Summary of Findings and Conclusion

The paper examined wh-movement in Tiv in the context of wh-question formation. The focus was to examine the syntactic mechanism and properties of wh-movement in the language based on three objectives, namely; to determine what elements undergo permutation, what motivates wh-movement in the language and to examine the nature of the landing site of wh-words for wh-questions in the language. The result revealed the following facts about wh-movement in Tiv. One, the moved element in a wh-question is the wh-QW. The findings also reveal that preposed QWs also pied-pipe adjunct prepositions. The wh-question words move into a higher dominating position in the CP domain. Wh-movement in Tiv is motivated by a [+focus] factor; rather than by a [+wh] feature as is the case with many other languages. The study also reveals that in this construction, movement targets a position within the complementiser domain. Nevertheless, the analyses show that the landing site is a [+focus] position within the CP field. In addition, the analysis also show that Tiv differs in the sense that wh-movement in Tiv leaves either filled pronominal of unfilled (empty) traces. It is however, recommended that the complementiser domain in Tiv be explored further in relation to understanding functional projections in the language.

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