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THE CO-OCCURRENCE OF PREDICATE CLEFTING AND WH-QUESTIONS IN TRINIDAD DIALECTAL ENGLISH*

ABSTRACT. This paper examines the properties of a grammatical construction called a predicate cleft (PC), which occurs in a regional dialect of English, Trinidad Dialectal English (TDE), spoken on the Eastern Caribbean island of Trinidad. The examination of the PC in TDE is of typological interest inasmuch as it resembles similar constructions in certain West African languages, A PC renders focus or contrastive focus to a verb in a given sentence by copying the verb and preposing it. Similar verb focusing constructions have been observed for many West African languages, including Vata and Nweh, as well as for Caribbean Creoles (Koopman 1984, Piou 1982). The PC in TDE is also of theoretical interest when combined with wh-question formation; the wh-subject/object asymmetries explored here provide interesting support for an escape hatch for whphrases in an intermediate position between VP and Tense that is comparable to a VP-adjoined position (Chomsky 1986). Evidence is also provided for a CP-like domain lower in the clause; I argue that both a wh-phrase and a verb focused in a PC have focus features that must be checked in a Focus Phrase (FocP). The current investigation enriches the characterization of both PCs and wh-question formation by looking not only at each operation individually but also examining their interaction with one another as well as with adverbs.

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1. Introduction to Predicate Clefting

1.1. The Cleft Construction

Cleft constructions are used in both Standard English (SE) and Trinidad Dialectal English (TDE) as a grammatical device to render the property [+focus] to a selected syntactic category within a sentence. Focus in general can be described in cognitive terms as drawing the attention of the hearer to a specific part of a sentence that a speaker considers to be salient in a given discourse. É Kiss (1998) has argued that the cleft construction specifically expresses IDENTIFICATIONAL FOCUS (also referred to as CONTRASTIVE FOCUS) in English; i.e., it expresses exhaustive identification of an individual from a presupposed relevant set of individuals. This contrasts with INFORMATION FOCUS, which conveys new information that is non-presupposed (cf. Rooth 1992).

Cleft constructions focus one constituent of a sentence by moving the constituent in question to the front of the sentence following it is/it was in SE and is/was in TDE.¹

The cleft construction in (3) corresponds to the declarative sentence in (2):

- (2) Tim did give his car to Misha. (TDE) 'Tim gave his car to Misha.'
- (3) Is/Was TIM who/that did give his car to Misha. (TDE) 'It is/was TIM who/that gave his car to Misha.'

In (3) it is Tim, as opposed to someone else, who gave his car to Misha. Focused elements are shown in capital letters from here onward. These examples show that SE and TDE are able to utilize cleft constructions to focus subject Determiner Phrases (DPs). Both TDE and SE are also able to cleft object DPs and PPs (Cozier 2002).

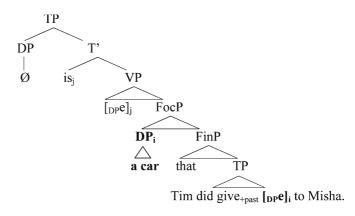
Following Chomsky (1977), I assume that cleft constructions are derived by *wh*-movement. There have been various proposals in the

¹ Unlike null expletive languages such as Spanish and Italian, TDE is not generally a *pro*-drop language.

literature related to the derivation of cleft constructions. I will adopt a variation of the head raising analysis of restrictive relative clauses (Vergnaud 1974, Kayne 1994). I assume the representation in (4b) for the TDE cleft in (4a):

(4)a. Is a CAR that Tim did give to Misha. (TDE) 'It is a CAR that Tim gave to Misha.'

b.



The cleft construction is derived by Ā-movement of the DP, *a car*, to FocP where the appropriate focus feature is checked.² Since the copula can carry tense for cleft constructions in both SE and TDE, the copula moves to tense under certain assumptions as illustrated in (4b) for both dialects.

As previously noted, both subject and object DPs, as well as PPs, can be focused via cleft constructions in both SE and TDE by means of movement to FocP. However, a verb or predicate cannot be focused by moving the verb to the post-copular position of a cleft construction, leaving its extraction site empty.

(5) *Was/Is DID GIVE that Tim his car to Misha. (TDE)
*It was/is GAVE that Tim his car to Misha. (SE)

Examples (5) show that predicate clefting in English is impossible when an empty category is left behind as a by-product of verb movement into the post-copular position. However, SE and TDE both have alternative strategies for verb focus: they focus VPs in pseudocleft constructions:

² Following Rizzi (1997), I will assume that focused elements appear in FocP.

(6) What Tim did do was GIVE his car to Misha. (TDE) 'What Tim did was GIVE his car to Misha.'

TDE has another method for focusing a verb. This method, PREDICATE CLEFTING, is illustrated in (8):

- (7) Tim go walk. 'Tim will walk.'
- (8) The Predicate Cleft Construction in TDE
 Is WALK (that) Tim go walk.

 'Tim will WALK (as opposed to run, drive, etc.)'

 'Tim really will WALK.'

Instead of leaving an empty category, the movement of the focused verbal element to the left periphery leaves behind an identical verbal copy.^{3,4}

(i) Is SICK the baby sick. (TDE) 'The baby is really SICK.'

A similar construction is observed in Haitian.

(ii) Se malad tifi a malad. It's sick baby DET sick 'The baby is SICK.' (Haitian) (Piou 1982)

These data conflict with É Kiss's (1998) claim that adjectives cannot be clefted because they do not denote individuals.

(iii) *It's sick that he was. (SE) (É Kiss 1998)

TDE does not allow utterances such as in (iii) either. However, varieties of Irish English (IE) can cleft both APs and VPs without copies at the extraction site (iv, vi). Examples, based on the IE literature, are from Jim McCloskey (p.c.).

- (iv) It was very ill he looked. (Clefted AP)
- (v) It was washing himself John was.
- (vi) It's talk to each other they did. (Clefted VP)
- (vii) It's destroyed me you have.
- (viii) *It's talk to each other (that) they.

A clefted element does not have to denote an individual. Furthermore, if IE is clefting the same element as in TDE, then the presence of a copy in TDE (and

³ To my knowledge there is no verb class in TDE that cannot be predicate clefted. This contrasts with Haitian (Larson and Lefebvre 1991) where individual-level predicates are cleftable, while stage-level predicates are not.

⁴ Adjectives can also undergo predicate clefting:

The TDE predicate cleft (PC) construction supports a view of movement as copying and deletion, as posited by Van Riemsdijk and Williams (1981). The existence of a copy of the verb at its extraction site in PCs indicates that the displaced verb is copied, but after movement the copy is not deleted.

As shown in (8), there are two meanings that can be associated with PCs. The most prominent reading is the contrastive focus reading as presented earlier for regular clefting; out of the set of all possible verbs, the clefted verb has the property that its action has taken place in contrast to those verbs that have not been clefted. Superficially, the alternative reading does not present a contrastive reading. However (8) can possibly, but not necessarily, be used to refute an untrue statement that Tim is not going to walk. Within this context the truth-value of the focused verb is emphasized such that under the conditions stated in the sentence and/or in discourse. the action denoted by the focused verb is in fact true (in contrast to false). Thus, there might be a contrast in the polarity of the utterance (i.e. Tim is indeed walking as opposed to not walking). From here on, this alternative reading is indicated in SE glosses either by using the modifier *really* in front of the verb or by putting the verb in all capitals.

Predicate clefting does not copy tense or aspect markers; the focused verb in a PC construction must be in its bare stem form, as shown in examples (9) and (10).

other languages where PCs leave a copy) could be due to underlying differences in the grammar of those languages independent of the size of what is being clefted. For example not only are examples like (vi) impossible in TDE, but VP Ellipsis with *did* is also impossible:

Examples (iv-viii) indicate that IE cannot cleft an inflected verb in a VP (v, vi) unless there is an appropriate licensing head at the extraction site (vii). In IE there would never be a stranded tense or a deleted tense in the lower position (viii) (McCloskey, p.c.). These tensed verbs (v, vii) also suggest that the size of what is clefted in IE is different from TDE where verbs do not cleft with tense. I leave a proper comparison of IE and TDE for future work.

Footnote 4 continued

⁽ix) *I did eat all the same things you did do.

^{&#}x27;I ate all the same things you did'

(9) Past tense in TDE

- a. Is WALK (that) Tim did *walk*. (Bare Verb Copied) 'Tim WALKED (as opposed to running, skipping, etc.)' 'Tim really WALKED.'
- b. *Is DO (that) Tim did walk. (Aux. Copied)
- c. *Is DID WALK (that) Tim did walk. (Aux.+Verb Copied)
- d. *Is DID WALK (that) Tim walk. (Aux.+Verb Copied)

(10) Progressive Aspect (Present) in TDE

- a. Is WALK (that) Tim walking. (Bare Verb Copied)
 'Tim is WALKING (as opposed to running, etc.)'
 'Tim is really WALKING.'
- b. *Is WALKING (that) Tim walking.⁵ (Verb-ing Copied)

This restriction also applies to the present habitual aspect, modals, and auxiliaries.

VP topicalization and predicate clefting are similar and both have been argued to derive via wh-movement. In addition, there are conditions under which Tense cannot move with the verb in VP topicalization. Example (11d) is bad whether or not the final 'did' is included.

- (11)a. Everybody thought that Bill might leave and (is) LEAVE he did.⁶ (TDE)
 - b. *Everybody thought that Bill might leave and did leave he (did). (TDE)
 - c. Everyone thought that Bill might leave and LEAVE he did. (SE)
 - d. *Everyone thought that Bill might leave and LEFT he did. (SE)

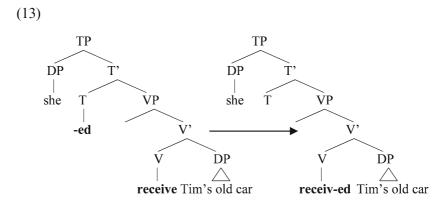
At other times, however, in SE/TDE, the topicalized verb must be inflected, as shown in the following SE example.

- (12)a. *Everyone thought that Bill was washing his clothes and WASH his clothes he was. (SE)
 - b. Everyone thought that Bill was washing his clothes and WASHING his clothes he was. (SE)

⁵ This example is bad, but not as bad as examples where the tense marker is separate from the verb as in (9c).

⁶ In TDE, however, (11a) does not sound as natural as, 'Everybody thought that Bill might leave and is LEAVE he did leave' (TDE); PCs seem to be preferred.

In both predicate clefting and VP topicalization of the type in (11a, c), a constituent below TP must undergo movement. If this were not so, one would expect the inflected verbs to be able to cleft/topicalize. Chomsky (1955, 1965) proposed a theory of verbal inflection according to which the tense affix and the verbal stem to which it is attached originate as separate constituents. Under a more recent version of this account a verb originates in a Verb Phrase, while tense and agreement originate higher up in a Tense Phrase. Thus, for purely inflected forms the tense affix must attach to the verb. This is illustrated for SE past tense in (13):⁷



The examples (9–10) indicate that the constituent that moves in predicate clefting does not include tense. Hence, the moved constituent must not involve TP, but some sort of movement that is associated with VP. However, objects and complements of the verb cannot be clefted with the verb.⁸ This seems to indicate that predicate clefting involves head movement, and not phrasal movement. The following sentences are bad regardless of whether or not the material in parentheses is included.

This single exception will not be resolved here, but see Cozier (2002).

⁷ In (13) I show tense lowering to the verb (cf. Chomksy's 1981 RULE-R). A number of theoretical and empirical issues arise from this lowering operation; see Lasnik (2000) for discussion.

⁸ There seems to be an exception in TDE with *go* that, to the best of my knowledge, exists with no other verb:

⁽i) Is [gone] he gone.

⁽ii) Is [gone to the store] he gone.

⁽iii) Is [gone with Mary] he gone.

- (14)a. *Is WALK TO WORK that Tim walking (to work). (TDE)
 - b. *Is SING THE SONG that Tim did *sing* (the song). (TDE)
 - c. *Is GIVE HIS CAR TO MISHA that Tim did *give* (his car to Misha). (TDE)

Based on the examples in (14), predicate clefting appears, on the surface, to be V movement and not VP movement.

Whereas regular clefting can move an entire phrase (e.g., DP, PP, etc.) and does not leave behind a copy, TDE predicate clefting only seems to move a verb and must leave behind a copy. Nevertheless, there is evidence that indicates that predicate clefting, like regular clefting, is derived by phrasal movement and not head movement. First, both regular clefts and PCs can move focused elements from simple and embedded sentences.

- (15)a. Is WALK Tim say (that) Nicky *walking* to the store. (TDE)
 - 'Tim says that Nicky is WALKING to the store.'
 - b. Is A NEW CAR (that) Tim say Nicky did buy for DJ. (TDE)
 - 'It is a new car that Tim says Nicky bought for DJ.'

In (15), the displaced constituent crosses over an intervening head (*say*). If predicate clefting is indeed head movement and not phrasal movement, then predicate clefting presents a clear violation of the Head Movement Constraint (HMC) (Travis 1984). Further, it is well established that head-movement cannot cross a clausal boundary, while phrasal movement to an Ā position can.⁹ Further evidence for phrasal movement in PCs will be presented in Sections 2.1 and 2.2.

The evidence leads to the conclusion that PCs, like regular clefts, entail phrasal movement. Even though predicate clefting leaves behind a copy of the focused verb in the position where it was base generated, I have thus far assumed that both regular clefts and PCs are derived via *wh*-movement. Evidence that PCs are derived via *wh*-movement has been presented previously for PCs in Haitian (Piou 1982) and Vata (Koopman 1984). Below, evidence that PCs in

⁹ Cross-clausal head movement is generally disallowed by the HMC or its equivalent. Nevertheless, Kayne (1989b) and Roberts (1994) propose that Romance clitics can move up through an empty C into a higher clause.

TDE are also derived via wh-movement will be presented, based on diagnostics of wh-movement presented by Chomsky (1977). Additional evidence will be presented that this movement may involve adjunction to VP, as proposed in Chomsky (1986).

1.2. Predicate Clefting as Movement

Chomsky (1977) argues that English clefts involve \bar{A} movement (wh-movement), as is evidenced by their apparent unbounded nature and sensitivity to well-known islands for wh-movement. Predicate clefting is also unbounded and island sensitive. ¹⁰

- (16)a. Is TALK he tell me that she talk about Ricky.
 - b. Is TALK he tell me *that* mummy say *that* daddy say that she *talk* about Ricky.
 - c. *Is TALK he tell me where she talk about Ricky.

(Loc Adjunct wh)

d. *Is TALK he tell me why she talk about Ricky.

(Reason Adjunct wh)

e. *?Is TALK he tell me who she talk about.¹¹

(Obj wh)

f. *Is HELP Hilda give her car to the friend who help her.

(Relative clause)

In (16b) we see that predicate clefting is unbounded. In (16c–f) we see that predicate clefting exhibits standard island effects. ¹² The evidence in (16) shows that that although predicate clefting leaves behind a copy of the verb, it is indeed derived via movement as Chomsky has proposed for regular clefting.

2. PIED-PIPING OF NON-VERBAL CONSTITUENTS IN PREDICATE CLEFTING

2.1. Adverb Pied-piping

In this section I show that adverbs can be displaced with the focused verb in PCs, providing evidence for a phrasal movement

¹⁰ Wh-movement is sensitive to island effects in TDE as in SE (Cozier 2002).

¹¹ This example slightly better than the others. This seems true of complements vs. adjuncts in general.

¹² Predicate clefts in Haitian and Vata are also sensitive to island effects (Piou 1982, Koopman 1984).

account.¹³ Because adverbs can sometimes also originate in the main clause, it will be important to show that there are clear cases where an adverb moves from the embedded clause with the focused verb in predicate clefting.

First of all, the observation that an adverb can modify the focused element shows clearly that the displaced focused element is indeed some sort of verbal constituent. In the following example we see that predicate clefting can pied-pipe certain preverbal adverbs.

(17) Is still SLEEP he sleeping.

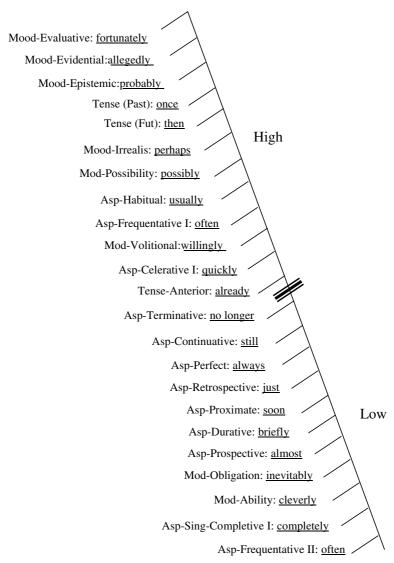
'He is still SLEEPING as opposed to doing something else.'

'He is still SLEEPING.'

However, only some pre-verbal adverbs can pied-pipe with the clefted verb. Cinque (1999:106) proposes that there is a universal hierarchy of functional heads that determines adverb order; particular adverbs always occur with an associated functional head according to semantic class. Cinque's hierarchy, based mainly on Italian and French data, is generally supported by pairs of sentences where adverbs must occur in a particular order. For Cinque there are two main classes of adverbs (HIGH and LOW); these two classes correspond to an older distinction between Sentence and VP adverbs (Jackendoff 1972). Cinque's hierarchy, as arranged by Tim Stowell (UCLA lecture notes, 1999), is shown in (18). I propose a high/low distinction that is slightly different than Cinque's. Whereas Cinque's spilt comes between usually and often, mine is between already and no longer. As we see below, this split is motivated by the distribution of adverbs that can be pied-piped in predicate clefting. We will also see that the low adverbs are not a single class; hence the correlation with Jackendoff's VP adverbs is not perfect. Some of these low adverbs can be base-generated in the main clause, behaving like Sentence adverbs.

¹³ See Koopman (1984, ex. 7) for similar phenomena in Vata.

(18) Cinque (1999) Hierarchy of Adverbs



Low adverbs, as shown in (19), can pied-pipe with PCs independently of whether or not they can be base-generated in the main clause.

- (19) 'Low' Adverbs
 - a. Is still SLEEP he sleeping.

'He is still SLEEPING as opposed to doing something else.'

'He is still SLEEPING.'

b. Is briefly TOUCH he did touch upon that matter.

'He briefly TOUCHED upon that matter (as opposed to doing something else with that matter).'

'He briefly TOUCHED upon that matter.'

c. Is cleverly AVOID he avoid the question.

'He cleverly AVOIDED the question (as opposed to cleverly doing something else with the question, like answering it).'

'He cleverly AVOIDED the question.'

d. Is always EAT he eating.

'He is always EATING as opposed to doing something else.'

'He is always EATING'

This pattern can be replicated for the full range of low adverbs. The examples in (20) show that not all of the low adverbs can be independently base-generated in the *is*-clause for SE or TDE. Yet, even these adverbs (20b, c) can be pied-piped (19b, c). These examples show us clearly that PCs can pied-pipe adverbs. Adverbs that can be independently base-generated in the *is*-clause (ex. 20g) also indicate that adverbs in (19) were all pied-piped. When these adverbs are in a PC they modify the verb; *always* modifies *eating* in (19d). However when they are clefted independently of PCs they modify something else; *always* does not modify *eating* in (20g).

- (20)a. *Is still John that/who sleeping. (TDE)
 - *It is still John that/who is sleeping. (SE)
 - b. *Is *briefly* John that/who did touch upon that matter. (TDE)
 - *It is *briefly* John that/who touched upon that matter. (SE)
 - c. *Is *cleverly* John that/who answered the question. (TDE)
 - *It is cleverly John that/who answered the question. (SE)

- d. ?Is no longer John that/who eating. (TDE) It is no longer John that/who is eating. (SE)
- e. Is just John that/who eating. (TDE)
 It is just John that/who is eating. (SE)
- f. ?Was inevitably John that/who was eating.(TDE) It was inevitably John that/who was eating. (SE)
- g. Is always John that/who eating. (TDE) It is always John that/who is eating. (SE)

I now show that high adverbs cannot pied-pipe in PC constructions. To demonstrate this, I need to first control for the possibility of base generation in the main clause. As illustrated in (21), only some high adverbs can be base generated there.

- (21)a. Is *allegedly* John that Rachel visit. (TDE) 'It is *allegedly* John that Rachel visited.'
 - b. Is *probably* John that Rachel go visit. (TDE) 'It is *probably* John that Rachel will visit.'
 - c. *Was *quickly* John that did walk. (TDE) *It was *quickly* John that walked. (SE)
 - d. *Was *already* John that did eat. (TDE)
 *It was *already* John that ate. (SE)
- In (22) we see that the only high adverbs that can appear with the clefted verb are the ones that can be base generated in the main clause.
 - (22)a. Is allegedly THIEVE he did thieve her car. (TDE)
 - b. Is probably WALK he go walk. (TDE)
 - c. *Is quickly WALK he walking. (TDE)
 - d. *Is already EAT I eat. (TDE)

Examples (21) and (22) indicate that there is no pied-piping of high adverbs; rather, some high adverbs may be base generated in the main clause.

In sum, I have shown that clefted predicates are able to pied-pipe certain adverbs into a higher clause. Low adverbs can be pied-piped with the verb independently of whether or not they can be base-generated in the main clause; high adverbs can be pied-piped with the verb only if they can be base-generated in the main clause. The pied-piping of the low adverbs would be impossible under a head movement account, and thus lends strong support to a phrasal

movement account of predicate clefting. We also see that some low adverbs must originate in the lower clause while some others may originate in the higher clause. Hence they do not form a single class.

2.2. Wh-phrase Pied-piping

Additional support for the phrasal movement account comes from the fact that wh-phrases can be displaced with the focused verb. One generally does not expect wh-movement and clefting to cooccur; this can be explained by Rizzi's (1997) proposal that the two compete for the same landing site. Within TDE there is empirical evidence to support Rizzi's prohibition. In the following examples we see that wh-movement cannot occur in conjunction with clefts.

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(23)a. He did give the cookies to Mel. (TDE) 'He gave the cookies to Mel.' s
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b. Is MEL that he did give the cookies to. (TDE)

(Clefted IO)

'It is MEL that he gave the cookies to.'

c. WHAT he did give to Mel? (TDE)

(wh-DO)

'WHAT did he give to Mel?'

d. *Is WHAT MEL (that) he did give to? (TDE)

(Clefted wh-DO + IO)

e. *Is MEL WHAT (that) he did give to? (TDE)

(Clefted IO + wh-DO)

Examples (23a-b) show a declarative sentence and a corresponding cleft, with the indirect object in focus position. Example (23c) shows a simple wh-question. However examples (23d-e) show that a wh-phrase cannot co-occur with a clefted non-verbal XP. This shows the incompatibility of clefting and wh-movement, perhaps because wh-operators and focused material compete for the same position, as Rizzi (1997) proposes.

The examples in (24) suggest that predicate clefting and regular clefting are instances of the same syntactic process; the two cannot co-occur in the same clause:

- (24)a. Mel jumping. (TDE)
 - b. Is MEL that jumping. (TDE)
 - c. Is JUMP (that) Mel jumping. (TDE)
 - d. *Is MEL JUMP (that) jumping. (TDE)
 - e. *Is JUMP MEL (that) jumping. (TDE)

Although regular clefting cannot co-occur with either wh-movement or predicate clefting, as predicted under Rizzi's account, unexpectedly we find that PCs can co-occur with some wh-movement. Consider the story Jack and the Beanstalk as the context for the following data. When Jack brought home the beans in exchange for the cow, his mother threw away the beans.

- (25)a. What she did throw away? (TDE)
 - b. Is THROW she did *throw* away the beans. (TDE) 'She THREW away the beans (as opposed to cooking them, eating them, planting them, etc.)' 'She really THREW away the beans.'
 - c. Is **what**_i **THROW** she did *throw* away [e]_i there? (TDE) 'WHAT is it that she really THREW there?'

In (c) we see that the question in (a) can co-occur with the focused verb as in (b), if the speaker wants to know what it is that Jack's mother really threw away in the story.

The simplest account for the co-occurrence of the wh-phrase with predicate clefting as observed in (25c) is that the focused verb and the wh-phrase move separately into the left periphery. This is not out of the ordinary since only a wh-phrase, a constituent that can move to the front of the sentence anyway, moves in front of the focused verb. However, the co-occurrence of wh-phrases and focused elements contrasts with previous arguments by Rizzi (1997) that wh-phrases and focused elements compete for the same position. In the same manner that focused material expresses exhaustive identification (i.e. one element out of a set of elements), a wh-phrase refers to one element out of a set. This similarity between wh-phrases and identificationally focused elements suggests that both focused elements and wh-phrases may have a common feature [+exhaustive] that must be checked for in the focus position. If this is the case, then one would expect to see a complementary distribution of wh-phrases and focused elements, as opposed to their co-occurrence as in (25c).

Although predicate clefting and wh-question formation can co-occur, example (26) shows that the wh-phrase cannot follow the focused verb as an object usually does in relation to a verb.

(26) *Is **THROW** what she did *throw* away there?

We also find that a wh-phrase can pied-pipe material in front of the focused verb, such as an NP and a preposition.

- (27)a. Is TIE he go tie the knot with Tamar.
 - b. Is **which girl** TIE he go *tie* the knot with there?
 - c. Is SEND he did send the letter to Gladys.
 - d. Is **to who** SEND he did *send* the letter?

Interestingly, not the entire range of *wh*-question words can combine with predicate clefting to form questions.

- (28)a. *Is how FIX he did fix the car? (He can't even fix scrambled eggs!)
 - b. *Is why FIX he fix the car? (I told him I'd do it myself!)
 - c. *Is when FIX he fix the car?
 - d. Is where FIX he did fix the car? (Was it in the garage?)
 - e. Is who FIX he did fix the car for? (You or me?)
 - f. Is what FIX he did fix yesterday?

There is nothing inherently problematic with clefting *how*, *why*, and *when*; these can be clefted independently of predicate clefting:

- (29)a. Is HOW he did fix the car? (He hasn't even an ounce of talent when it comes to fixing things.)
 - b. Is WHY he fix the car? (I told him I wanted a new one.)
 - c. Is WHEN he fix the car? (He hardly has time for anything else but work.)
 - d. Is WHERE he did fix the car? (Was it in the garage?)
 - e. Is WHO he did fix the car for? (Himself or me?)
 - f. Is WHAT he did fix yesterday?

Examples (29a–c) show that the ungrammaticality of (28a–c) must come from the particular combination of predicate clefting and *wh*-movement of *how*, *why*, and *when*. That all these *wh*-phrases can be clefted independently yet cannot co-occur with predicate clefting

suggests that the co-occurrence of a wh-phrase with predicate clefting is not due to independent movement of the wh-phrase.

I propose that the wh-phrase+clefted predicate move as a single constituent. The data showing that tense cannot move with the verb suggests that the projection that moves is smaller than TP. If predicate clefting is VP-movement, then where, who, and what can be described as behaving in a VP-internal manner while how, why, and when behave like they are generated outside of VP. How, why, and when have been treated as adjuncts to VP while who, and what, but not where, have been treated as complements of the verb. Alternatively, predicate clefting may move a projection intermediate to VP and TP. Under this latter account, the adjunction of how, why, and when would be above this intermediate projection, while where would be inside the moved projection. Under either approach, we account for why how, why, and when are incompatible with predicate clefting; they are base generated higher than where, who, and what and thus cannot be included as part of the constituent that is displaced in predicate clefting.

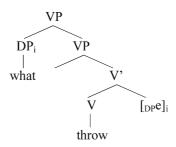
For those wh-phrases that can be displaced with the verb, we have seen evidence that the wh-phrase and the verb move as a single constituent. Again, this supports the position that predicate clefting is phrasal movement and not head movement. Additionally, if the wh-phrase and the verb move as one constituent, then there is no longer a conflict with Rizzi's (1997) proposal. By moving as a single unit, wh-phrases and focused verbs no longer need to compete for a single focus position. The question then arises as to the source of the wh-phrase + verb constituent.

Chomsky (1986) proposes, for theory internal reasons, that successive cyclic movement of a *wh*-object entails movement through a VP-adjoined position as one of the crucial steps in the derivation. The behavior of *wh*-phrases in the cleft construction appears to show support for this aspect of the *Barriers* framework. For our purposes it does not matter what forces the VP-adjunction step. ¹⁴ The crucial point is that the PC construction shows the *wh*-phrase stopping off in exactly the position that Chomsky hypothesized. Under Chomsky's proposal, the *wh*-phrase adjoins to VP and then moves on to [Spec, CP]. I suggest that after VP-adjunction, another

 $^{^{14}}$ Note that the equivalent is forced in the Derivation by Phase framework (Chomsky 2001).

step is possible whereby the entire VP to which the *wh*-phrase adjoins can move on with the *wh*-phrase in the PC derivation:

(30)



If the derivation sketched above is on the right track, there is a point in the derivation of a *wh*-question when the *wh*-phrase is directly to the left of the verb, exactly as has been observed when predicate clefting and *wh*-question formation are combined. As *wh*-objects, but not *wh*-subjects must move through a VP adjoined position, one also expects the existence of subject/object asymmetries when *wh*-movement and predicate clefting are combined. This is indeed the case, as discussed in Section 4.

There are two lines of evidence that indicate that a *wh*-element and a clefted predicate form a constituent. These are based on coordination and co-occurrence restrictions on regular clefting and *wh*-movement. First, [*wh*-phrase + verb [+focus]] can be coordinated with another [*wh*-phrase + verb [+focus]] as illustrated in (31). This is a classical argument for constituency; it indicates that the sequence, [*wh*-phrase + verb [+focus]], is a constituent at some point in the derivation.

(31) Is WHAT PICK and WHAT THROW he *pick* up and *throw* there?

'What has he PICKED up and THROWN there?'

The VP-adjunction account illustrated in (30) derives the right word order and constituency. ¹⁵ Further evidence for the structure of the left periphery of VP can be drawn from the following examples, where predicate clefting with an adverb is combined with a *wh*-question:

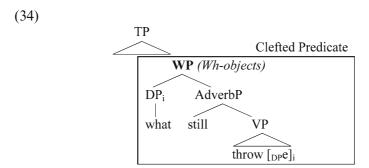
¹⁵ The VP-clefting proposal would seem to predict that other VP-internal material (e.g. indirect objects) should move with the clefted predicate. This is not the case; see Section 3 for discussion.

- (32)a. Is what THROW he still throwing there?
 - b. *Is **still what** THROW he *throwing* there?
 - c. Is what still THROW he throwing there?
 - d. *Is what THROW still he throwing there?

Example (32a) shows the co-occurrence of predicate clefting with wh-question formation. Examples (32b–d) show that if the adverb is displaced with the verb, it must occur between the wh-phrase and the verb and cannot occur to the left or to the right of the [wh-phrase+verb [+focus]] constituent. This indicates that the adverbial functional projections posited for the lower adverbs in Cinque (1999) are between the focused verb and the intermediate position through which wh-phrases pass as they move out of VP. There is also evidence that the sequence [wh-phrase+adverb+verb [+focus]] is a constituent. Two such sequences can be coordinated with one another.¹⁶

(33) Is WHAT STILL PICK and WHAT STILL THROW he *picking* up and *throw* there. (TDE)
'What is he still PICKING up and THROWING there?'

The following picture of the left periphery of VP emerges:



The emerging picture of the left periphery of VP strongly resembles that of Rizzi's (1997) finely articulated CP periphery. While the intermediate position for *wh*-phrases is higher than the VP-adjoined position posited in Chomsky (1986), the evidence presented here argues for an intermediate *wh*-object landing site between VP and TP, as was the case with Chomsky's VP-adjoined position. I will

 $^{^{16}}$ Coordination, as in (33), seems to depend on the specific adverb and other aspects of sentence structure.

refer to this process as INTERMEDIATE wh-MOVEMENT and the projection to which it moves as WP. WP will be treated here as the projection of a null head W.

3. PROPOSED STRUCTURE AND DERIVATION OF PCS

In this section I propose a derivation for predicate clefting and wh-movement. So far, I have presented several pieces of evidence that predicate clefting is phrasal movement:

- 1. If predicate clefting is head movement, then movement out of an embedded clause would violate the HMC (15).
- 2. Some adverbs can be displaced with the moved verb (19).
- 3. Wh-phrases are displaced with the verb as a single constituent when predicate clefting and wh-question formation are combined (31); adverbs can be part of this constituent (33–34).

We need to reconcile this evidence that predicate clefting is phrasal movement with the observation that complements cannot move with the focused verb:

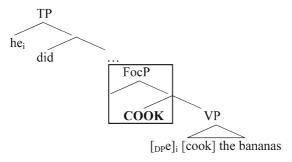
- (35)a. *Is EAT THE MANGO John did eat.
 - b. *Is WORK WITH RACHEL Judy did work.

One account that reconciles these two seemingly conflicting sets of observations involves remnant movement, where extraction of the arguments of the verb out of VP is followed by movement (copy but not deletion) of VP to a higher position (cf. Den Besten and Webelhuth 1990).¹⁷ The treatment of predicate clefting as remnant VP focus would account for the observation that predicate clefting behaves like phrasal movement, yet in general does not displace the focused verb with its complements. The principle behind a remnant movement approach is that enough material can move out of a phrase so that when this phrase does move, it superficially resembles head movement. In TDE predicate clefting, the verb can, in general, move only with a restricted set of dependents, such as wh-objects and adverbs, but not a complete VP.

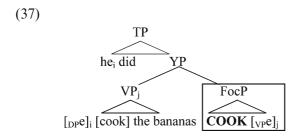
¹⁷ A VP-remnant approach is also taken in the treatment of PCs in Hatian (Larson and LeFebvre 1991), and Vata and Nweh (Koopman 1997).

A downside to the remnant VP approach is that there is no clear motivation for the movement of the complements of the verb outside of VP. As an alternative to remnant VP movement, I propose that the verb, but not its complements, moves out of the VP. To this end, I incorporate a clause internal FocP position for the focused verb, following similar proposals for Italian VS order (Belletti 1999) and OVS constructions in Kirundi (Bantu, Ndayiragije 1999). This is illustrated in (36), where the copying of the verb to the internal Foc position parallels independently attested types of head movement in other languages. In addition, (36) shows that the subject moves out of [Spec, VP] into [Spec, TP] for case checking.

(36) Is COOK he did *cook* the bananas.

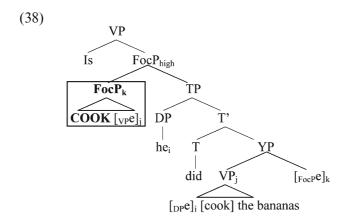


In the next step of the derivation the VP in (36) moves to a functional projection (YP) that is higher than FocP so the verb can check tense or agreement features.



Once the verb has moved to the clause-internal FocP (henceforth FocP_{low}), the entire FocP moves to a higher FocP (FocP_{high}) to check its focus features:¹⁸

 $^{^{18}}$ Although not shown in (38), I assume the copula moves to a higher T, as in (4b).



Since the copy of the verb in VP merges with tense, it is no longer the same element as the copy that moves to FocP. I propose that this is why both copies must be overt (deletion of the copy would constitute irrecoverable deletion of Tense).

Movement into two FocP positions, as shown above, may seem redundant. However, this may be related to a distinction that has been made between contrastive focus vs. new information focus (É Kiss 1998). The former has been associated with a higher focus position in the left periphery (cf. Brody 1990, Puskas 1996, Rizzi 1997) while the latter has been argued to be not associated with a particular syntactic head (É Kiss 1998). É Kiss notes that a proper response to a question can entail information focus but not contrastive focus. However, this observation does not apply in a strict manner to TDE PCs, which can be interpreted as having contrastive focus and still be used to form a proper response to a question as shown in (39). This is perhaps the case because predicate clefting is not purely contrastive focus but also involves another type of focus that is associated with a lower focus position. Alternatively, different focus features may be checked in two focus positions, one of these features being contrastive in the sense of É Kiss (1998).

- (39)a. What you doing there, girl?¹⁹ 'What are you doing, girl?'
 - b. Is COOK I cooking.'What I am doing is COOKING.''I'm just COOKING a bit.'

PCs can in general have two possible meanings, one being contrastive focus of verbs, and the other focusing on the truth of the statement, perhaps contrasting true and false. In the second meaning the action indicated by the clefted verb is true as opposed to false under conditions stated in the sentence or discourse.²⁰

Considering that a PC can, in general, be contrastive and be a proper answer to a question, two focus positions may indeed be involved: one checking for the feature [+contrastive] and the other for the feature [+truth-conditionally relevant].

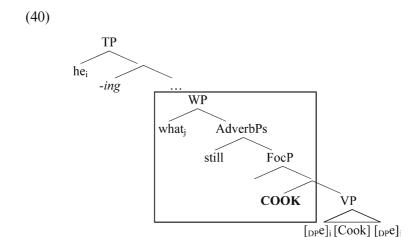
The derivation of a PC co-occurring with a wh-object and adverb is similar. After movement of the subject he into [Spec, TP] for case checking and the copying of the verb in FocP_{low} without deletion, the wh-object, having checked case VP-internally, does intermediate wh-movement to WP, which is at least above the lower adverbs as I have defined them above.

¹⁹ "Girl" is an endearing term for a female peer. In the second reading for (39b) there might be a contrast in degrees of action such that the cooking is happening 'a bit' in contrast to some greater intensity of some other action.

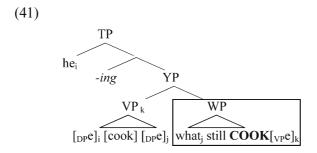
²⁰ This is similar to the meaning that one gets from verb doubling constructions in Biblical Hebrew (Genesis 2:17):

u'mei-Eitz ha-daAt tov va'rA but-from (the) tree (of) the-knowledge (of) good and-evil b'yom toxal mimenu ki axalxa mimenu mot from-it because in-clay don't eat vou-cat from-it die tamut vou-will-die

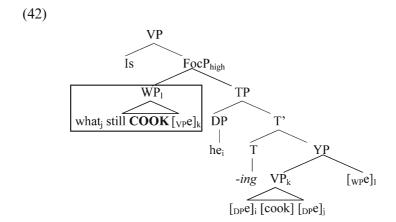
^{&#}x27;But from the tree of the knowledge of good and evil, don't eat from it because in the day you eat from it (it is true, not false) that you will DIE.'



The *wh*-phrase moves into WP, an intermediate landing site. Next, the VP, devoid of its *wh*-object, moves to YP.



Then, the constituent WP, with the wh-phrase, optional adverb, and focused verb are pied-piped up to FocPhigh so that the wh-phrase and verb can check focus features.



Given this analysis of PCs in TDE, I now turn to some of the predictions of my account.

4. WH-subject/Object Assymetries in TDE Predicate Clefting

4.1. Wh-Subject/Object Asymmetries in Predicate Clefting Out of a Matrix Clause

Subject/object asymmetries arise when predicate clefting is combined with *wh*-movement. PCs out of simple matrix clauses show that the co-occurrence of an object *wh*-phrase with a PC is good (43a), while the co-occurrence of a *wh*-subject with a PC is bad (43b).

(43)a. Is who_i TALK she *talking* about [e]_i? b. *Is who_i TALK [e]_i *talking* about she?

To make sense of the contrast in (43a-b) we must first recall from Section 2.2 (cf. (31) and (34)) that the *wh*-phrase and the focused verb move as one constituent. The *wh*-phrase can be part of this constituent, having done intermediate *wh*-movement into WP, a position that *wh*-objects must land in when moving out of the matrix clause. The observed underlying subject/object asymmetry can be explained by the following two aspects of the account presented in Section 3:

- (44) Prior to wh-movement, a wh-subject (being VP-internal) moves to [Spec, TP] to check case.
- (45) A wh-object checks case within the VP, but must move through an intermediate position between T and V.

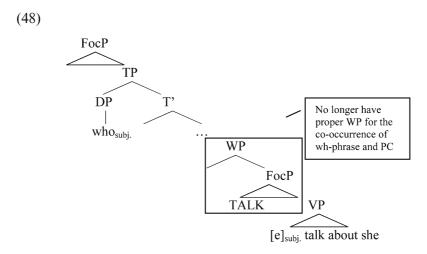
I will now show that the subject/object asymmetries follow from (44–45) in conjunction with the theoretical principles in (46–47):

- (46) No improper movement is allowed.²¹
- (47) The lowest \bar{A} position is the intermediate position in WP.

 $[\]overline{^{21}}$ A movement precedes \bar{A} movement, \bar{A} to A movement is banned, \bar{A} to \bar{A} and A to \bar{A} movement is fine, and there is no downward movement.

The key to the grammaticality of the co-occurrence of the wh-object with the focused verb is that at a particular point in the derivation the wh-object precedes the verb after \bar{A} -movement into WP. The resulting configuration allows the wh-object to form a constituent with the verb such that the verb is then able to pied-pipe this constituent to $FocP_{high}$ where both verb and wh-phrase can check for their respective focus features.

As seen in (43b), the co-occurrence of a *wh*-subject with predicate clefting is ill-formed; this follows from the fact that the *wh*-subject is unable to form a single constituent with the focused verb.



Due to the availability of the [Spec, TP] position for subjects in general, a wh-subject does not need to pass through a WP position. Therefore even though we have a rather low A position, WP, and given that this A position is lower than the highest subject case position, we would not expect the subject wh-phrase to move into this position. The subject must first undergo A-movement to [Spec, TP]. However, this is already a position that c-commands WP. As lowering is prohibited, a wh-subject will not be able to reach [Spec, WP] and become a cleftable constituent with the verb. If we were to allow wh-subjects to move first into [Spec, WP] and then to [Spec, TP], this would violate the well-known prohibition on A to A movement. By not forming a single constituent with the focused verb, the wh-phrase and the focused verb now display the effects of competition noted for wh-elements and focused material in previous investigations. The focused verb and the wh-phrase cannot each move to FocPhigh independently to check their focus features.

4.2. Predicate Clefting with Bi-clausal Sentences

When a sentence is bi-clausal my account predicts cases where a *wh*-subject can co-occur with a focused verb and cases where a *wh*-object cannot co-occur with a focused verb. These predictions are borne out.

4.2.1. Predicate Clefting of a Matrix Verb with a Wh-Subject or Object in the Embedded Clause

This section examines cases where the *wh*-subject/object asymmetry disappears; examples (49a–b) show that there is no subject/object asymmetry when clefting the matrix predicate and *wh*-moving an embedded argument. In both of these cases the focused verb originates higher than the *wh*-phrase, and c-commands the case positions of both the subject and object *wh*-phrases.

(49)a. Wh-Object-embedded; Verb-matrix

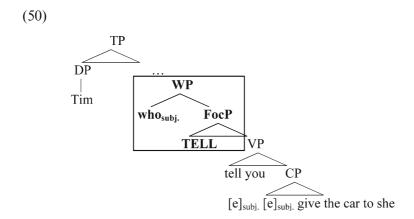
Is who_i TELL Tim *tell* you [that he give the car to [e]_i]? Ans: 'What Tim really TOLD me was that he gave the car to MISHA.'

b. Wh-Subject-embedded; Verb-matrix

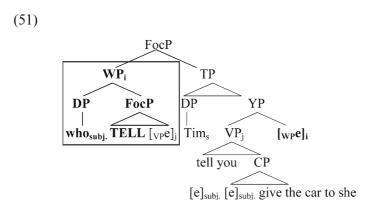
Is who_i TELL Tim *tell* you [[e]_i give the car to she]? Ans: 'What Tim really TOLD me was that JOHN gave the car to her.'

One sees in (49b) that the *wh*-subject of an embedded clause is compatible with predicate clefting of a main clause verb. In this respect, the subject of the embedded clause behaves like an object of the main clause verb, and so does the object of the embedded verb as seen in (49a); the *wh*-subject/object asymmetry disappears.

I have posited that the subject/object asymmetries arise because wh-subjects check case VP-externally, while wh-objects do not. The conditions under which there are no subject/object asymmetries, (49a) and (49b), follow from my account. A wh-phrase can co-occur with predicate clefting if the case position of the wh-phrase is c-commanded by the focused verb. Since this is true of both an embedded wh-object and an embedded wh-subject, both can co-occur with predicate clefting of a matrix verb. The derivation of (49b) is shown in (50):



First, the *wh*-subject checks case in [Spec, TP] of the embedded clause. This case position is c-commanded by the verb *tell*. The *wh*-subject moves up cyclically to the WP projection of the matrix clause. The *wh*-subject is able to remain in WP, as seen previously for *wh*-objects, because it has already checked case in the embedded clause. The formation of a [*wh*-subject + verb [+focus]] constituent indicates that *wh*-subjects that move from an embedded clause to a matrix clause land in the WP en route to their final landing site:



The structure in (51) shows that embedded subject and matrix objects share the property of raising to the specifier of WP, an \bar{A} position. This leads one to expect embedded subjects to pattern with matrix objects with regard to PC combinations. Under the analysis presented here, this is not surprising, because it is precisely movement into WP that allows predicate clefting and wh-phrases to co-occur. The analogous operation with a wh-object originating in the embedded clause and the focused verb in the matrix clause is

also well formed, as its case position is also lower than the WP projection.

(52) ECM subjects behave like other embedded subjects:²² Is who_i CONSIDER she did *consider* [e]_i smart?

This strengthens the generalizations that I have made. ECM objects behave like regular objects, in that their case position is c-commanded by the matrix WP position.

4.2.2. Predicate Clefting of a Matrix Verb with High Wh-words from the Embedded Clause

Recall that high wh-adjuncts such as how, when, and why were unable to pied-pipe in PCs (28). My account of this was that these adjuncts originated higher than WP. Nevertheless, we predict that how, when, and why should be able to pied-pipe when they originate in an embedded clause and are combined with predicate clefting from a matrix clause. As they raise from the embedded clause, we expect them to raise into [Spec, WP], as other wh-phrases do. Once in the matrix WP position, how, when, and why should be able to pied-pipe with WP and the focused verb to FocPhigh as in (51). In addition we predict that how, when, and why should only have embedded construal when combined with matrix predicate clefting, because they could not have originated in the matrix clause.²³ As the data in (53) show, these predictions are borne out.

- (53)a. Is SAY she *say* she go call back. (*Matrix-V PC*) 'She SAID that she will call back.'
 - b. Is when SAY she say she go call back? ([Embedded-high wh + matrix-V] PC)

'WHEN did she say that she will CALL back?'

In (53b), when unambiguously has an embedded interpretation. These data can be replicated with why and how. The lack of ambiguity in (53b) follows immediately from the analysis of (50) and (51).

²² Although ECM verbs do not occur as naturally in TDE as they do in SE, the embedded infinitive does sound more natural in TDE if verbs like *want* and *need* are treated like ECM verbs. These sound even better when the embedded infinitive is preceded by *for*, perhaps an indication that these are really examples of *for*-deletion.

²³ A further prediction is that these *wh*-adjuncts cannot pied-pipe with a focused verb clefted from the embedded clause, as we saw in (28).

4.2.3. Predicate Clefting of an Embedded Verb with a Wh-subject or Object in the Matrix or Embedded Clause

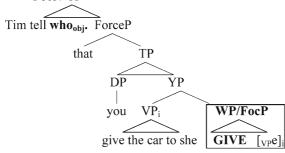
Not unexpectedly, my account predicts that neither the *wh*-subject nor the object in the main clause can be predicate clefted with an embedded clause verb:²⁴

- (54)a. *Is who_i GIVE Tim tell [e]_i [that you *give* the car to she]?
 - b. *Is who_i GIVE [e]_i tell Tim [that you *give* the car to she]?

In both (54a) and (54b), the verb in the embedded clause does not c-command the case position of the *wh*-object or the *wh*-subject. Hence both the *wh*-object and the *wh*-subject are outside of the domain wherein they can form a constituent with the focused verb. The derivation of the ill-formed (54a) is illustrated below in (55).

FocP/ TP
Tim tell who_{obj}.

(55)



The VP moves to [Spec, YP]. However, the wh-object of the matrix clause is too high to form the proper constituent with the focused verb. It cannot lower into the WP position of the embedded clause. Furthermore, there would be no room in embedded FocP_{low} to accommodate the wh-phrase at any later point in the derivation. If the wh-phrase does not form a constituent with the focused verb by moving into the WP position, then it may not co-occur with predicate clefting. The ungrammaticality of (54b), where a wh-subject originates in the matrix clause, is accounted for in a similar manner.

 $^{^{24}}$ Example (54b) seems worse than (54a) in degree of ungrammaticality, although both are bad.

My account also correctly predicts that embedded predicate clefting and embedded *wh*-arguments preserve the subject/non-subject contrast:

(56)a. Is who; GIVE Tim tell you [he *give* the car to [e];]?
b. *Is who; GIVE Tim tell you [[e]; *give* the car to she]?

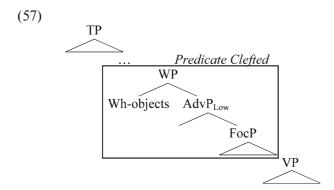
The same arguments that were presented for examples in (43) will also account for the contrast in (56). The only difference between (43a) and example (56a) presented above is that in (56a) the constituent containing the *wh*-object and verb must move out of the clause where it is base-generated into FocP_{high} of the matrix clause, passing over a verbal head, *tell*, on the way.

5. DISCUSSION/CONCLUSIONS

At the very least, the prevalence of verb doubling focus constructions presents a good argument for movement as copying and deletion. I do not believe that the absence of deletion is a mere coincidence related to the PC construction. Crosslinguistically, one finds that for the most part, verbal constituents move without copies left behind. One also finds that all kinds of elements (verbs excluded) are clefted, again, without copies. Perhaps, as I have suggested, verb copying is a result of movement with PF pronouncing both copies of the verb. The focused copy must be spelled-out, and the tensed copy cannot be deleted because doing so would delete Tense irrecoverably.

Several asymmetries that arise in conjunction with predicate clefting and wh-movement have been described and analyzed. It is argued here that the co-occurrence of a wh-phrase with a PC crucially involves movement of the wh-phrase to an intermediate WP position that is between VP and Tense. In the Barriers system, such a position was needed in order to allow non-subject extraction without violating Subjacency. In this paper the empirical evidence supports the existence of a similar position, but further shows that this position is not as low as Chomsky posited; it must be above lower

adverbs as presented here.²⁵ Given my analysis of these constructions, the following picture emerges for the left periphery of VP:



This looks very much like a complete clause below TP (cf. 34). Hence, the archetype of clausal structure may already be present below Tense. The non-cleftability of higher adverbs (cf. 2.1) as well as *wh*-phrases such as *how*, *why*, and *when* (in simple clauses, cf. 28) with the focused verb suggests that these elements are above WP and, as such, outside the domain of predicate clefting.

The formation of the [wh-phrase + verb] constituent and its subsequent movement to high FocP captures a particular stage or cycle in the derivation of questions where a wh-phrase is in a position (WP) that is intermediate between its ultimate landing site and the site where it is base-generated. This provides empirical evidence for successive cyclic movement, highlighted here by movement into the left periphery of VP.

In order to account for the observation that wh-objects co-occur with predicate clefting while wh-subjects do not, a case must be made for the existence of WP. In order for a wh-phrase to form a cleftable constituent with a focused verb, the wh-phrase must move into the WP projection that is within the domain (left periphery) of the VP. The asymmetries discussed here follow from whether or

²⁵ This hypothesized WP position is similar to object positions proposed by Kayne (1989a) for past participle agreement in French and also by Johnson (1991) in order to account for the *NP-first* order to complements of verbs in English. Kayne posited that objects go through AgrO for agreement purposes, while Johnson posited that this object position is in [Spec, VP] and that nominal complements move to this position for case checking. These positions being A-positions however are not compatible with the WP position presented here, which is clearly an Ā-position.

not the wh-phrase needs to move into WP to become part of the next cycle in the derivation. Such movement is permitted only if the wh-phrase has already checked case, i.e. \bar{A} to A movement is prohibited.

This paper analyses a previously unreported construction. Predicate clefting in itself, and when combined with wh-movement, provides evidence for a variety of theoretical constructs that have been proposed independently on the basis of other evidence. These include the copy theory of movement, separation of verbs and tense into different projections, the distinction between high and low adverbs (shown not to be a single class) as well as high and low wh-phrases, and the existence of a VP-peripheral WP position as an escape hatch for Ā-movement.

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²⁶ Though not discussed here one may relate the current discussion to later theories like *phases* (Chomsky 2001).

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