A Preliminary Study on the *Wh*-Cleft Construction in English

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0. Introduction

The *wh*-cleft construction (henceforth, WCC) in English is a copular construction with a clause headed by a *wh*-word in the pre-copular position and a focal constituent in the post-copular position:

(1) a. What they like to do is kiss monkeys.
    b. What Mary is is important to herself.

Note that each of the sentences in (1) has a corresponding simple "non-cleft" sentence like (2), but the apparently similar sentence in (3) does not, as in (4):

(2) a. They like to kiss monkeys.
    b. Mary is important to herself.
(3) *What Mary is is important to her.*
(4) *Mary is important to her.*

The *wh*-clause in sentence (3) is used referentially, and refers to something like Mary's position/post/occupation, as in (5):

(5) Mary's position/post/occupation is important to her.

It is, therefore, necessary to distinguish the WCC in (1) and the non-WCC in (3). As will be seen below, the two constructions have distinct properties.

1. Odd properties of the WCC

The WCC possesses rather odd properties, as shown by Higgins (1979), Williams (1983), among others. We illustrate them below, comparing the WCC and the non-WCC like (6).
(6) a. What John is is important to himself. (WCC)  
    b. What John is is important to him. (non-WCC)

First of all, the WCC resists the yes/no question formation, while the non-WCC does not:

(7) a. * Is what John is important to himself?  
    b. Is what John is important to him? (Williams (1983))

Second, the WCC does not tolerate the subject-raising operation, but the non-WCC accepts it:

(8) a. * What John is seems to be important to himself.  
    b. What John is seems to be important to him. (ibid.)

Third, it is impossible to embed the WCC in a small clause complement, but it is possible to embed the non-WCC in such a position:

(9) a. * I consider what John is important to himself.  
    b. I consider what John is important to him. (ibid.)

Fourth, the matrix copula of the WCC is not subject to the deletion operation, while that of the non-WCC tolerates it:

(10) a. What John is is important to himself, and  
      * what Mary is $\phi$ important to herself.  
    b. What John is is important to him, and  
      what Mary is $\phi$ important to her. (ibid.)

And finally, the WCC resists the matrix copula contraction, but the non-WCC does not:

(11) a. * What they're doing's amusing each other.  
     b. What they're doing's amusing them. (Hankamer (1974))

These observations may give rise to an idea that the WCC requires its copula to be located in full form between the \(wh\)-clause and the focal element. This idea, however, is not a viable one, as demonstrated convincingly by Williams (1983).
2. Williams' analysis

Williams examines the "reversed" WCC (henceforth, RWCC) with the focal constituent preceding the copula and the \textit{wh}-clause following it:

\begin{enumerate}
\item Important to himself is what John is. \textit{(Williams (1983))}
\item Angry at Mary was what he was. \textit{(Culicover (1977))}
\end{enumerate}

Williams shows that the RWCC possesses properties distinct from those of the (non-reversed) WCC.

First, the WCC resists the yes/no question formation, as we have seen in (7a), but the RWCC does not:

\begin{enumerate}
\item Is what John is important to himself? \textit{(7a)}
\item Is important to himself what John is? \textit{(Williams (1983))}
\end{enumerate}

Second, the WCC does not tolerate the subject-raising operation, as seen in (8a), while the RWCC accepts it:

\begin{enumerate}
\item What John is seems to be important to himself. \textit{(8a)}
\item Important to himself seems to be what John is. \textit{(ibid.)}
\end{enumerate}

Third, it is not possible to embed the WCC in a small clause complement, as (9a) shows, but it is possible to embed the RWCC in such a position:

\begin{enumerate}
\item I consider what John is important to himself. \textit{(9a)}
\item I consider important to himself what John is. \textit{(ibid.)}
\end{enumerate}

And finally, the WCC resists the matrix copula deletion, as seen in (10a), while the RWCC tolerates it:

\begin{enumerate}
\item What John is is important to himself, and *what Mary is $\phi$ important to herself. \textit{(10a)}
\item Important to himself is what John is, and important to herself $\phi$ what Mary is. \textit{(ibid.)}
\end{enumerate}

These indicate the inadequacy of the idea suggested in the previous section that the copula is required to be located in-between in full form.

Notice here that the RWCC behaves in the same way as the non-WCC: \textsuperscript{1}
(13) Is important to himself what John is?
(14) Important to himself seems to be what John is.
(15) I consider important to himself what John is.
(16) Important to himself is what John is, and important to herself φ what Mary is.

(7) b. Is what John is important to him?
(8) b. What John is seems to be important to him.
(9) b. I consider what John is important to him.
(10) b. What John is is important to him, and what Mary is φ important to her.

This fact led Williams (1983) to an idea that the RWCC, not the WCC, reflects the underlying order, and he offers a proposal to derive the WCC from the underlying structure of the RWCC by an inversion rule:

(17) \[
\begin{array}{l}
\text{[what John is]} \quad \text{is} \quad \text{[important to himself]}
\end{array}
\]

\[\uparrow \text{inversion}\]

\[
\begin{array}{l}
\text{[important to himself] \quad \text{is} \quad \text{[what John is]}}
\end{array}
\]

Williams suggests that the inversion rule in question is a stylistic rule which derives the following locative inversion construction:

(18) In each hallway is a large poster of Lincoln.

Recent studies, however, reveal that this rule operates in different ways than Williams expected it does. In the next section, we will indicate that the WCC behaves in the same way as the negative inversion construction (henceforth, NIC) like (19): \(^{(2)}\)

(19) At none of the beaches are the lifeguards alert. (Eomonds (1976))

### 3. Arguments for the negative inversion analysis

This section illustrates similarities between the NIC and the WCC, arguing that the WCC is derived by the inversion rule which gives rise to the NIC.

First of all, the NIC is not subject to the yes/no question formation, as we can see in (20), and therefore the negative inversion analysis can reject (7a) straightforwardly:

(20) a. At none of the beaches are the lifeguards alert.

b.* Are at none of the beaches the lifeguards alert?

(7) a.* Is what John is important to himself?
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Second, since the NIC resists the subject-raising operation as in (21), the negative inversion analysis can account for the unacceptability of (8a) easily:

(21) a. At none of the beaches are the lifeguards alert.
   b. * At none of the beaches seem to be the lifeguards alert.
(8) a. * What John is seems to be important to himself.

Third, the NIC does not appear in a small clause complement, as in (22), and therefore the negative inversion analysis can correctly rule out the example in (9a):

(22) a. At none of the beaches are the lifeguards alert.
   b. * I consider at none of the beaches the lifeguards alert.
(9) a. * I consider what John is important to himself.

Fourth, since the NIC does not tolerate the matrix copula deletion, as seen in (23), the negative inversion analysis can predict the ungrammaticality of (10a):

(23) a. Only in the northern hemisphere is the polestar visible, and
   only in the southern hemisphere are the Magellanic Clouds in sight.
   b. Only in the northern hemisphere is the polestar visible, and
      * only in the southern hemisphere \( \phi \) the Magellanic Clouds in sight.
(10) a. What John is is important to himself, and *what Mary is \( \phi \) important to herself.

And finally, it is impossible to contract the matrix copula in the NIC, as in (24), and the negative inversion analysis can predict that (11a) is ill-formed:

(24) a. Never is he to darken my doorstep again.
   b. * Never's he to darken my doorstep again. (Kaisse (1983))
(11) a. * What they're doing's amusing each other.

4. Dialectal variation

As we have seen in the last section, the negative inversion analysis seems to be viable. There are, however, dialectal sentences that the negative inversion analysis cannot account for straightforwardly. These dialectal sentences, in fact, suggest "the locative inversion analysis."

First of all, contrary to Williams' judgment of (8a), Culicover (1977) and Kuno (1977) report that the examples in (25) below are acceptable:
What John is seems to be important to himself.
What John is seems to be proud of himself.
What he likes to do appears to be to kiss monkeys.

This dialectal variation may be related to the fact that the locative inversion construction (henceforth, LIC) tolerates the subject-raising operation, as we can see in the following examples:

a. Over my windowsill seems to have crawled an entire army of ants.
   b. On the hill appears to be located a cathedral. (Bresnan (1994))

It may possible to suppose that the rule for the LIC derives the WCC in (25).
Second, although most speakers reject the WCC with a matrix auxiliary like (27), Culicover (1977) and Kuno (1977) accept it, as in (28):

a. * What John will be will be very tall.
   b. * What John has been has been very rude. (Higgins (1979))

These examples cannot be derived by the rule for the NIC, since it would give rise to a distinct word order like (29):

(29) [what John will do] will [kiss monkeys] be
    ↑ inversion
    [kiss monkeys] will be [what John will do]

It is possible, however, to argue once again that the WCC in (28) is derived by the rule for the LIC, since the LIC tolerates the sequence of an auxiliary and a verb, as we can see in the embedded clauses of the following sentences:

a. John was afraid that into the room next might walk his wife.
   b. Mary pointed out that under the awning could be seen an old piano. (Rochemont and Culicover (1990))

Third, Culicover (1977) also adduces a type of examples which contrast sharply with Williams' example in (7a). Although most speakers reject any yes/no questions of the WCC, Culicover (1977) reports that the sentences in (31) are well-formed:
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(7) a. * Is what John is important to himself?
(31) a. Is what John is angry at Mary?
   b. Has what Mary has been been proud?
   c. Will what Mary does be to wash herself?

The negative inversion analysis can rule out (7a), but cannot rule in (31a), as we saw in the last section. It also cannot derive the declarative form underlying (31b,c), as we have just seen above.

Note that we find no parallelism here between the WCC in Culicover's dialect and the LIC:

(32) a. * Did on the wall hang a Mexican serape?
    b. * Was among the ruins found a skeleton? (Bresnan)

The fact in (32), in fact, seems to be surprising, since the inverted locative PP of the LIC appears to occupy the subject position of a finite clause. The PP is in a position preceding a finite matrix verb, as in (26), and in a position following a complementizer "that" and preceding an embedded auxiliary, as in (30).

In this connection, let us consider the following examples pointed out by Bresnan (1994):

(33) a. * I expect (for) on this wall to be hung a picture of Leonard Pabbs.
    b. On this wall I expect to be hung a picture of Leonard Pabbs.

The inverted locative PP of the LIC cannot remain in the subject position of the infinitival clause, but can stay in the initial position of the finite matrix clause. Then Bresnan argues that the inverted locative PP in (33) originates in the infinitival clause and moves obligatorily to a position adjoined to the finite matrix clause, a position which is not subject to the yes/no question formation. Thus, her proposal can account for the ungrammaticality of (32).

Now a question arises of why the inverted locative PP of the LIC moves obligatorily and is adjoined to the finite clause. This question reminds us of an approach adopted by Stowell (1981) to the following examples:

(34) a. It would be nice for the counter-top to have a nice paint job.
    b. * It would be nice for on the counter-top to have a nice paint job.
(35) a. That Jenny is a good hostess is self-evident.
    b. * Is that Jenny is a good hostess self-evident?

Stowell claims that non-nominal expressions cannot have case and therefore cannot stay in a case-marked position. Stowell's approach, if correct, can give a principled answer to the question above. The inverted locative PP of the LIC moves obligatorily and is adjoined to a finite clause, since the PP cannot have case and cannot stay in a case-marked position. Note
also that Stowell's approach can explain why the sentences in (31), repeated here, are well-formed:

(31) a. Is what John is angry at Mary?
    b. Has what Mary has been been proud?
    c. Will what Mary does be to wash herself?

As is often pointed out, wh-clauses can behave as a nominal and occupy a case-marked position:

(36) a. It depends on what you know.
    b. Is whether John wins or not of any great importance?

Hence, the wh-clause of the WCC is allowed to remain in a subject position of a finite clause and the WCC tolerates the yes/no question formation, as in (31).^{3}

5. Conclusion

In this paper, we illustrated the odd properties of the WCC, outlined Williams' inversion analysis, and argued for the negative inversion analysis. We also proposed that the two types of WCC in the two dialects involve two distinct inversion rules. This proposal, if viable, marks an important step toward a principled explanation of why there are two dialects of WCC and why the examples in the two dialects behave as they do and not otherwise.

This paper did not discuss the deletion/contraction of the copula of the WCC in Culicover/Kuno's dialect, since I cannot find speakers of this dialect. I will leave the discussion for future research.

Notes

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1. Williams does not adduce any example of the RWCC that corresponds to (11):

(11) a. * What they're doing's amusing each other.
    b. What they're doing's amusing them.

The parallelism between the RWCC and the non-WCC breaks down, as is shown by the following example and (11b):

(i) *Amusing myself's what I'm doing. (Kaisse (1983))

2. Although Williams' original idea cannot account for the WCC in his dialect, it seems to be valid for the WCC in another dialect, as will be seen in sections 3 and 4.

3. In the following type of sentence, the subject PP stays in a case-marked position:

(i) Under the bed is a good place to hide.
(ii) Is under the bed a good place to hide? (Bresnan (1994))

This type of PP behaves as a nominal, as demonstrated by Bresnan(1994). Notice that the focal element of the RWCC also counts as a nominal, as can be seen in the following sentences:

(13) Is important to himself what John is?
(15) I consider important to himself what John is.

References


