Subjacency Condition predicts that constituents cannot be extracted from *wh*-islands. However, though extracting an argument from an untensed *wh*-island does not induce a violation, as in (1), extracting an argument from a tensed *wh*-island does, as in (2).

(1) What, do you wonder [CP how [IP to repair ti tj]]?
(2) *What, do you wonder [CP how [IP John repaired ti tj]]?

To explain the contrast, Chomsky (1986) assumes that a tensed IP is exceptionally an inherent barrier. However, it is an ad hoc solution. Manzini’s (1992) address-based locality theory does not offer a satisfactory solution of the problem either. The contrast between (1) and (2) is the main concern of this squib, and it is argued that the structural difference of the embedded clause between (1) and (2) exhibits the contrast.1

Let us consider the structural difference between (1) and (2). In the LGB-framework, the embedded clause in both (1) and (2) is equally analyzed as a CP. However, the infinitival complement in (1) turns out not to be a CP, when we examine the projection difference between ECM and control infinitives. The difference is derived from the nominalization test of the higher predicate which takes infinitival complements. ECM verbs like *believe* do not allow nominalization, as shown in (3).

(3) a. They believe John to be intelligent.
    b. *Their belief (of) John to be intelligent.

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1 Chomsky (1995b: Ch. 4) suggests that a clause structure based on Agr projections can be eliminated. Following the suggestion, I regard the traditional IP as TP henceforth.
A visible complementizer does not occur in English ECM constructions, whereas it occurs in Italian ECM constructions, as shown in (4).

(4) Italian ECM
Ritengo [CP di [TP avere sempre fatto il mio dovere]].
I believe Comp to have always done my duty
Furthermore, nominalization of ECM constructions is possible in Italian.

(5) la sua [[supposizione N] [CP di [PRO essere felice]]
his/her consideration Comp to be happy
Pesetsky (1995) presents an analysis that explains these differences by showing the blocking of nominalization in other phenomena such as double object constructions. He claims that zero morphemes are affixes, that is, they require morphological support as lexical property. Suggesting that phonetically null complementizers are also zero-affixes, he argues that the blocking of nominalization of ECM constructions is due to the incorporation of a zero-affix in the ECM verb. When a visible complementizer occurs, the nominalization of ECM verbs is possible, as in (6b).

(6) a. *their belief (of) John to be intelligent
    b. their belief that John is intelligent
A nominalizer morpheme is attached to the complex verb formed by V and the zero-affix as in (7). The derived configuration is illustrated in (8).

(7) They [COMP₁ [believed V] V] [CP tᵢ [TP John to be intelligent]]
(8) [N [V [COMP ʃ believe]-Nominalizer]]
The configuration in (8) violates “Myers’s generalization” as in (9), predicting the ungrammaticality of (3b).

(9) Myers’s Generalization
Zero derived words do not permit the affixation of further derivational morphemes [exceptions: -er and -able].
On the other hand, nominalization of control infinitives is possible as exemplified in the following:

(10) a. John’s determination [TP PRO to leave the company]
    b. [[determine]-Nominalizer]
According to Pesetsky’s (1995) analysis, this fact implies that there is no C incorporation in the verb and thus control infinitives have no C-projection, unlike ECM infinitives.

With this in mind, let us consider the syntactic structure of (1).

(1) What, do you wonder [how [PRO to repair tᵢ tᵢ]]
Under the minimalist system, a *wh*-phrase (bearing *wh*-feature) must enter into a checking relation with the functional category C which bears a strong Q feature before Spell-out (for further details, see Chomsky (1995b: Ch. 4)). In (1), the matrix verb’s complement is an infinitival complement containing an arbitrarily controlled PRO. According to the argument presented above, the infinitival complement has no C-projection, since control infinitives do not have C-projection unlike ECM infinitives. However, in this case, the *wh*-phrase in the embedded question in (1) cannot enter into a checking relation with the functional category bearing a strong Q feature. We assume then that the infinitival complement in (1) has such a projection above TP as Koizumi (1995) presents, i.e. PolP, and that the *wh*-phrase enters into a checking relation with the head of PolP which bears a strong Q feature, as shown in (11).3

(11) What do you wonder [PolP how [Pol' Pol [TP PRO to repair ti t]]]

According to Koizumi (1995), PolP in English may have (at most) two specifier positions by virtue of the bare phrase structure theory of Chomsky (1995a, 1995b), as shown in (12).

(12) [PolP XP [PolP YP [Pol' Pol TP]]]

This multiple specifier hypothesis and investigation of some recalcitrant A-bar movements in subordinate clauses in English contrive to explain the acceptability of *wh*-movement in sentences like (1).

In English, a topic element occurs between a complementizer and a subject in subordinate clauses, as in (13). Subject-AUX inversion may occur in certain types of embedded clauses (cf. Authier (1992), Lasnik and Saito (1992), Watanabe (1993), among others), as in (14).

(13) John said that these books, Bill put aside.

(14) a. John said that at no time would he agree to see Mary.
b. John said that under no circumstances should the dishes be put on the table.

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2 Notice that the PolP is not the same PolP as Culicover (1991) proposes. As Koizumi (1995) suggests, it provides positions for feature checking.

3 As an anonymous reviewer points out, the statement that the infinitival question which a verb like wonder takes as its complement is realized as a PolP needs to be supported by independent evidence. Though the matter demands deliberation, I leave it to future research for lack of space.
A topic element and an affective element can co-occur, as shown in (15).

(15) a. Becky said that these books, only with great difficulty can she carry.
    b. He said that beans, never in his life had he been able to stand.

Koizumi argues that the head of PolP in English may have two sets of NP-features, one for the canonical Spec, and one for the non-canonical (or adjoined) Spec. The elements in these positions enter into a checking relation with the head (Pol). Thus the preposed affective element in (15) is licensed in the canonical specifier position, whereas the topic element in (15) is licensed in the adjoined specifier position, as illustrated in (16).

(16) ... \([\text{CP that } [\text{PolP XP(Top)} [\text{PolP YP(Neg)} [\text{Pol'} \text{Pol(Top(Neg)) TP}]]]]\]

If we assume that only specifier positions can serve as landing sites for movement, a sentence like (17a) is predicted to be ruled out.

(17) a. *On which table did Becky say that these books, only with great difficulty can she put?
    b. Whi ... \([\text{CP ti'} t_i' \text{ that } [\text{PolP these books } [\text{PolP only with great difficulty } [\text{Pol'} \text{can } [\text{TP ... } t_i]]]]\]

In (17a), the first movement of the wh-phrase crosses the two A-bar specifiers of the embedded Pol and the canonical Spec of Pol is not equidistant with the Spec of the embedded C, as shown in (17b). The wh-movement violates the Minimal Link Condition (MLC) of Chomsky (1993). Thus (17a) results in the ungrammaticality.

As pointed out in Culicover (1991), topicalization creates an island whereas preposing of an affective element does not.

(18) Which books did Becky say that only to Aaron will she give?
(19) *Which books did Becky say that to Aaron, she will give?

The partial derivation of (18) is as follows:

(18) Whi ... \([\text{CP ti'' } t_i' \text{ that } [\text{PolP } t_i' [\text{PolP only to Aaron } [\text{Pol'} \text{will } [\text{TP she ... } t_i]]]]\]

Under Koizumi's PolP hypothesis, in (18) the wh-phrase moves to the sentence initial position by way of the adjoined Spec of the embedded Pol. The MLC is not violated in (18), since the adjoined Spec and the canonical Spec of Pol are equidistant from any other positions as they are both in the minimal domain of Pol. On the other hand, (19) has
two conceivable derivations, as illustrated below.

(20)  

(a) Whi ... \[CP t_i'' \text{ that } [PolP to Aaron [PolP t_i' [Pol' Pol [TP she ... t_i]]]]\]  
(b) ... \[CP t_i'' \text{ that } [PolP Top [PolP t_i' [Pol' Pol [TP ... t_i]]]]\]  
\[\text{MLC violation}\]  

(21)  

(a) Whi ... \[CP t_i' \text{ that } [PolP to Aaron [PolP [Pol' Pol [TP she ... t_i]]]]\]  
(b) ... \[CP t_i' \text{ that } [PolP Top [PolP [Pol' Pol [TP ... t_i]]]]\]  
\[\text{MLC violation}\]  

The wh-phrase in (20) moves through the lower Spec of Pol on its way, but the wh-phrase in (21) does not. In either case, it crosses the possible A-bar position (the topic phrase). Thus (19) is ruled out.

Let us turn to the sentence (1). Given the PolP hypothesis, (1) has two conceivable derivations, as shown in (22).

(22)  

(a) Whati do you wonder \[PolP t_i' [PolP howj [Pol' Pol [TP to repair t_i]]]\]  
(b) Whati do you wonder \[PolP howj [PolP t_i' [Pol' Pol [TP to repair t_i]]]\]  

In the embedded question of (22), the head of PolP bears a strong Q feature and establishes a checking relation with how in its Spec position before Spell-out. When what moves from its original position to the sentence initial position, it moves through the upper or the lower Spec of Pol on its way. In either case, it does not violate the MLC, since both how and the intermediate trace of what are in the minimal domain of the Pol. Thus the acceptability of (1) results.

In the case of (2), since the embedded question is a finite clause, we assume that the complement of wonder has C-projection as before, as
What do you wonder [CP how [C John repaired t]]

In (23), the embedded C bears a strong Q feature and establishes a checking relation with how in its Spec position before Spell-out. What crosses the possible A-bar landing site which is occupied by how. This movement violates the MLC. However, if the Pol in the embedded question in (23) bears an abstract feature, (23) yields another conceivable derivation, as shown in (24).

What ... [CP how C [Pol t [Pol Pol [TP John repaired t]]]]

Suppose that in (24) what moves through one of the specifier positions of the embedded Pol on its way to the sentence initial position. The movement from the Spec of the embedded Pol to the sentence initial position violates the MLC, since the Spec of the embedded C and the Spec of Pol are not in the same minimal domain and thus they are not equidistant from other positions. As a result, (2) is ruled out.6

To conclude, extracting a wh-argument from a tensed wh-island creates the configuration which induces an MLC violation; on the other hand, extracting a wh-argument from an untensed wh-island does not induce an MLC violation because it is an extraction by way of the escape hatch that the PolP in the untensed wh-island creates.7,8

5 ME and Belfast English (a variety of English spoken in Belfast, the capital of Northern Ireland) allow the complementizer that in finite embedded questions as in (i).

(i) I wonder what street that he lives in.

This fact suggests that finite embedded questions are realized as CPs.

If the head of PolP bears a strong Q feature and thus its specifier position is the target of wh-movement, the following derivation is possible in the finite embedded question:

(i) What do you wonder [CP t [Pol t [Pol how Pol [TP John repaired t]]]]

In (i), since what moves through the upper Spec of Pol and the Spec of C on its way to the sentence initial position, the movement does not violate the MLC. However, since the embedded Pol bears a strong Q feature that should be specified in the embedded C, the C is not licensed. Thus a derivation like (i) is not generated.

Unlike argument extraction from wh-island, adjunct extraction from wh-island exhibits a strong case of violation, whether it is a tensed or an untensed wh-island. The analysis here cannot give the mystery a satisfactory explanation. This issue requires more theoretical and empirical arguments. I leave it to future research.

The asymmetry between (1) and (2) is explained as a consequence of the MLC.
REFERENCES


However, as an anonymous reviewer points out, the MLC analysis poses a problem in that it cannot capture subject-object asymmetry and argument-adjunct asymmetry about tensed wh-island violations as in (i) and (ii).

(i)  a. *Who do you wonder whether t can help?*
    b. ??Who do you wonder whether we can help t?

(ii) a. ??Which car did you know how John fix t?
    b. *How did you know which car John fixed t?

The MLC analysis predicts that (i) and (ii) each exhibit the same degree of deviance, contrary to fact. This issue is discussed by Kitahara (1997). According to him, the degrees of deviance exhibited as in (i) and (ii) are not only determined by the MLC, but by an LF representation. That is, a violation of Full Interpretation at LF in addition to a violation of the MLC induces a severe deviance. See Kitahara (1997: Ch. 4) for further details of the discussion.