

TWO TYPES OF MAIN VERB INVERSION IN ENGLISH*

Akihiko Arano
Tohoku University

Keywords: Locative Inversion, Quotative Inversion, covert A-movement, intervention effects

1. Introduction

This paper investigates syntactic properties of Locative Inversion (henceforth LI) and Quotative Inversion (henceforth QI) constructions, as illustrated in (1) and (2) respectively.

(1) Locative Inversion

On the wall were standing two large blackbirds. (Postal (2004: 18))

(2) Quotative Inversion

“I’m so happy,” thought Mary.
(Collins (1997: 11))

They are similar in their surface forms and instantiate Main Verb Inversion constructions in English, within which elements are ordered roughly as ‘XP V DP.’

The aim of paper is to argue that LI and QI should be analyzed differently, contra some authors who have given a similar treatment to these constructions (Collins (1997) and Wu (2008) among many others). I newly show that the LI and QI construc-

tions differ as to whether they can co-occur with experiencer arguments selected by raising verbs, how pronouns are realized in tag questions, and whether *alone*-final NPs are allowed to occur therein. These differences between the two constructions are explained by arguing that the semantic subject in QI undergoes phrasal A-movement to [Spec, TP] at LF, while that in LI does not, owing to the presence of an expletive in [Spec, TP].

This paper is organized as follows. Section 2 presents the three types of contrast between LI and QI. Section 3 advances our proposal to derive the differences. Section 4 concludes the paper.

2. Empirical Facts

2.1. Fact 1: Intervention Effects by Experiencers

The past literature has shown that both LI and QI can be embedded under raising verbs as exemplified in (3) and (4) (Postal (1977), Kathol and Levine (1993), Wu (2008)).

(3) Near the fountain seem to have been found two purple bananas and a peach.
(Postal (1977: 148))

(4) “Leave me alone!” seemed to shout the little girl. (Wu (2008: 100))

What has remained unobserved so far, to the best of my knowledge, is the (in)compatibility of these constructions with experiencer arguments. When the experiencer appears just before the *to*-infinitive, LI is acceptable, but QI is not.¹

(5) On the wall seemed to me to be standing John.

(6) a. “Look at me. I’m still here!” seemed to shout the barn.

b.* “Look at me. I’m still here!” seemed to me to shout the barn.

QI with the experiencer argument is ameliorated when the experiencer is preposed or extraposed, as shown in (7).

(7) a. “Look at me. I’m still here!” to me, seemed to shout the barn.

b.? To me, “Look at me. I’m still here!” seemed to shout the barn.

c. “Look at me. I’m still here!” seemed to shout the barn, to me.

Importantly, not all kinds of intervening phrase are incompatible with QI. In contrast to experiencer arguments, adjuncts are allowed to occur in the middle position of QI.

(8) “Look at me. I’m still here!” seemed on some occasions to shout the barn.

This fact indicates that the unacceptability in (6b) cannot be explained solely in terms of word order restrictions such that there be nothing but *to* between a quote verb and a raising verb in QI. We have to explain why only experiencer arguments fail to appear in QI.

Another property of Quotative constructions to be explained is illustrated in (9), which constitutes a minimal pair with (6b) and shows that Quotative constructions can co-occur with experiencer arguments when inversion is not involved.

(9) “Look at me. I’m still here!” the barn seemed to me to shout.

2.2. Fact 2: The Realization of Pronouns in Tag Questions

As Bowers (1976) observes, tag pronouns in LI are realized as *there*.

(10) In the garden is a beautiful statue, isn’t there? (Bowers (1976: 237))

This is not true of QI, where tag pronouns must correspond to post-verbal DPs, as shown in (11).

(11) a. “Never!” cried a strange man, didn’t he?

b.* “Never!” cried a strange man, didn’t there/it/so?

2.3. Fact 3: Alone-Final NPs

The third difference is concerned with *alone* that appears after NPs and essentially means ‘only.’ When inversion is induced, post-verbal NPs can end with this expression in Quotative but not in Locative constructions.

(12) a. John alone is standing on the wall.

b.?? On the wall is standing John alone.

(13) a. “Look at me!” John alone shouted.

b. “Look at me!” shouted John alone.

3. Proposal

I assume the null expletive analysis of LI, following Postal (1977, 2004) and Bruening (2010). The structure of LI is represented as in (14), where a null counterpart of *there* has occupied [Spec, TP] and, therefore, a semantic subject has remained in-situ.

(14) LI: The Null Expletive Analysis



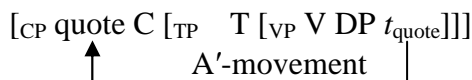
Accordingly, this analysis assumes that the sentences in (15) share the abstract structure.²

- (15) a. Near the fountain sat a large purple gorilla. (Postal (1977: 146))
 b. Near the fountain there sat a large purple gorilla. (Postal (1977: 146))

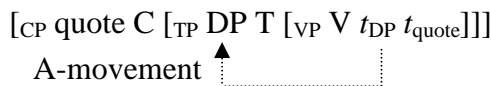
As for QI I propose that the semantic subject undergoes covert phrasal A-movement (cf. Polinsky and Potsdam (2012)). Thus, QI is derived as shown in (16), where a quote has moved to [Spec, CP] at surface structure, and a DP subject has moved to [Spec, TP] at LF.

(16) QI: The Covert A-movement Analysis

- a. Surface Structure



- b. LF Structure



When a subject moves overtly, in contrast, a non-inverted counterpart is derived.

In the following subsections, I show that my proposal provides an account of the characteristics of LI and QI reported in the last section.

3.1. Fact 1

My proposal accounts for the first contrast between the two constructions under the certain assumption about the experiencer argument.

As is well known, English subject-to-subject raising is not blocked by an inter-

veneing experiencer.

- (17) John seems to Mary t_{John} to be happy.

Given that Relativized Minimality relies on the c-command relation (Rizzi (1990)), and that subject-raising does not show Relativized Minimality effects, the experiencer *Mary* seems not to c-command the trace of the subject *John*. Binding consideration, however, shows the opposite result.

- (18) * They seem to him_i to like John_i.

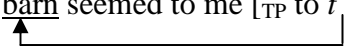
(Chomsky (1995: 304))


(18) shows that the pronominal experiencer cannot refer to the object in the embedded clause, which is a Condition C effect of the binding theory. Since the binding condition grounds on the c-command relation, the unacceptable status of (18) suggests that the experiencer c-commands into the embedded infinitive. Thus, (17) and (18) pose a problem that we call the experiencer paradox.

I circumvent this problem, following Kitahara (1997) and Epstein et al. (1998), by assuming that the c-command domain of an experiencer changes in the course of derivation. Subject-raising is not prevented, because the c-command relation is not established between the experiencer and the subject in the embedded clause at surface structure. By contrast, the experiencer is able to c-command into the infinitive at the level where the binding theory applies, i.e., at LF.

This assumption predicts that in English, covert A-movement is blocked by the experiencer, whereas overt A-movement is not. Since my analysis of QI crucially

relies on covert phrasal A-movement, it is predicted that Quotative constructions can be embedded under the raising verb unless inversion is induced and the experiencer act as an intervener for movement. Hence, the contrast in (19) falls under my analysis (the sentences in section 2.1. are repeated below with the relevant structure added).

(19)a. “Look at me. I’m still here!” [TP the barn seemed to me [TP to *t* shout]].
 (=9))

b. * “Look at me. I’m still here!” [TP \blacktriangle T seemed to me [TP to shout the barn]].
 (=6b))

(19a) is grammatical because the experiencer does not prevent overt A-movement. (19b) is, on the other hand, ungrammatical due to the status of the experiencer argument as an intervener for covert A-movement. If my analysis is on the right track, (19b) will be improved when the experiencer ceases to be an intervener. Then, it is reasonable that the examples in (20) are grammatical as a result of preposing or postposing the experiencer.

(20) a. “Look at me. I’m still here!” to me_i, [TP \blacktriangle T seemed *t_i* [TP to shout the barn]].

b. ? To me_i, “Look at me. I’m still here!” [TP \blacktriangle T seemed *t_i* [TP to shout the barn]].

c. “Look at me. I’m still here!” [TP [TP \blacktriangle T seemed *t_i* [TP to shout the barn]], to me_i].
 (=7))

The same effect is observed in Italian, where overt raising across experiencers is prohibited (see McGinnis (1988) for French and Holmberg and Hróarsdóttir (2003) for Icelandic).

(21) Italian

- a. * Gianni_i sembra a Maria [*t_i* essere Gianni seems to Maria to.be stanco].
 ill
 ‘Gianni seems to Maria to be ill.’
 b. A Maria_j, Gianni_i sembra *t_j* [*t_i* to Maria Gianni seems essere stanco].
 to.be ill
 ‘To Maria, Gianni seems to be ill.’
 (Bošković (2011: 4))

Furthermore, given that adjuncts in general do not count as interveners for A-movement because of their A'-status, as shown in (22), the grammaticality in (23) also follows from my analysis: Adjuncts do not preclude covert A-movement.

(22) The pope_i has on more than one occasion been criticized *t_i* for his actions regarding abuse by priests.
 (Bruening (2012: 6))

- (23) “Look at me. I’m still here!” [_{TP} [▲] T
 seemed on some occasions [_{TP} to shout
 the barn]]. (= (8))

Next, let us turn to LI. The derivation of LI does not involve the A-movement of a semantic subject, because a null expletive is in [Spec, TP]. Therefore, as *there* constructions, LI constructions can co-occur with the experiencer argument.

- (24) a. On the wall [_{TP} ^{expl} seemed to me
 [_{TP} to be standing John]]. (= (5))
 b. [_{TP} There seemed to me [_{TP} to be a
 man standing on the wall]].

Summarizing, I have proposed that QI involves covert phrasal A-movement, while LI does not. It is predicted that only the former is subject to the locality of movement. On the assumption that the experiencer c-commands material to its right only at LF, my proposal has explained why only LI is compatible with the experiencer argument occurring before *to*-infinitives.

3.2. Fact 2

In tag questions, a pronoun in the tag must agree with the syntactic subject, as illustrated in (25).

- (25) Guns are dangerous, aren’t they/*it?
 (Adapted from Postal (2004: 41))

Given the test of tag questions, my analysis predicts that LI and QI behave differently. The specifier of TP in LI is occupied by a null expletive. In contrast, this position is occupied by a DP subject in QI. Therefore, it is predicted that a pronoun in the tag

corresponds to an expletive in LI whereas that corresponds to a semantic subject in QI. This explains the second difference, repeated in (26).

- (26) a. In the garden is a beautiful statue,
 isn’t there? (= (10))
 b. “Never!” cried a strange man,
 didn’t he? (= (11a))

3.3. Fact 3

The distribution of *alone*-final NPs is not free. Simplifying somewhat, only NPs sitting in the subject position can host *alone* (see Postal (1974: 99-102)). Thus, *alone* can follow NPs in [Spec, TP], but it fails to modify objects.

- (27) a. Jones alone knows the secret
 formula. (Postal (1974: 99))
 b. * Call Bob alone. (Postal (1974: 99))

Given this restriction, the contrast in (28) is expected under my analysis.

- (28) a. ?? On the wall is standing John
 alone.
 b. “Look at me!” shouted John
 alone.

The post-verbal NP in LI does not move to [Spec, TP] due to the null expletive, and therefore cannot license *alone*. In contrast, the semantic subject moves to [Spec, TP] at LF in QI and the modification by *alone* is allowed.

3.4. A Further Consequence

Another prediction arising from my proposal is that LI’s and QI’s subjects are interpreted in different positions: The former are interpreted in the base position and the

latter in [Spec, TP]. This prediction is supported by control phenomena. (29) and (30) show whether post-verbal subjects in these constructions can be an antecedent of PRO in the adjunct phrase.

(29) a. Two sheiks lay near the oasis without talking.

(Nishihara (1999: 387))

b.* Near the oasis lay two sheiks without talking.

(Postal (1977: 150))

(30) a. “Ah, Pam,” said Sarah, waving her hand in disgust.

(Gyoda (1999: 278))

b.? “I am so happy,” thought Mary without actually saying.

(Branigan and Collins (1993: 6))

This contrast indicates that the semantic subject is interpreted higher in QI than in LI, which follows from the present analysis.

4. Conclusion

This paper has shown the hitherto unknown contrasts between LI and QI with respect to experiencer arguments, tag questions, and *alone*-final NPs. To explain these contrasts, I have proposed that the semantic subject of QI is moved covertly to [Spec, TP], whereas the semantic subject of LI does not undergo phrasal movement to [Spec, TP], where a null expletive is inserted. The proposed analysis has reduced the first difference to the (in)existence of covert phrasal movement, which is regulated by the locality of movement. The second difference has been accounted for in terms of the identity of elements in [Spec, TP]. Finally,

the distribution of *alone*-final NPs has been related to the position of post-verbal subjects.

*An earlier version of this paper was presented at the 30th meeting of the English Linguistic Society of Japan held at Keio University on November 10-11, 2012. I would like to express my gratitude to Yoshiaki Kaneko and Etsuro Shima for their invaluable comments and suggestions. I am grateful to Hiroyuki Nawata, Takashi Shizawa, Kensuke Takita, Tozawa Takahiro, and Keiichi Yamanaka for their helpful comments. My thanks also go to Taichi Nakamura, Shin-Ichi Kitada, Kenji Sugimoto, Masashi Totsuka, Motoki Sato, Yuki Ichinowatari, and Yu Tamura. All remaining errors and inadequacies are of course my own.

FOOTNOTES

¹ In this paper, I owe the judgment of sentences with no reference to my informants.

² Hiroyuki Nawata (personal communication) asked why null expletives are allowed only when PPs are fronted, and Takashi Shizawa (personal communication) asked why the definiteness effect is not observed in LI, as opposed to *there* constructions. I leave these questions for my future research (cf. Bruening (2010)).

REFERENCES

- Bošković, Željko (2011) "Rescue by PF Deletion, Traces as (Non)interveners, and the *That*-Trace Effect," *Linguistic Inquiry* 42, 1-44.
- Bowers, John (1976) "On Surface Structure Grammatical Relations and the Structure-Preserving Hypothesis," *Linguistic Analysis* 2, 225-242.
- Branigan, Phillip and Chris Collins (1993) "Verb Movement and the Quotative Construction in English," *MIT Working Papers in Linguistics* 18, 1-13.
- Bruening, Benjamin (2010) "Language-Particular Syntactic Rules and Constraints: English Locative Inversion and *Do*-Support," *Language* 86, 43-84.
- Bruening, Benjamin (2012) "No Such Thing as 'Defective Intervention'," ms., University of Delaware. <<http://udel.edu/~bruening/Downloads/DefectiveIntervention1.pdf>>
- Chomsky, Noam (1995) *The Minimalist Program*, MIT Press, Cambridge, MA.
- Collins, Chris (1997) *Local Economy*, MIT Press, Cambridge, MA.
- Epstein, Samuel David, Erich M. Groat, Ruriko Kawashima and Hisatsugu Kitahara (1998) *A Derivational Approach to Syntactic Relations*, Oxford University Press, Oxford.
- Gyoda, Isamu (1999) "On the Quotative Construction in English: A Minimalist Account," *English Linguistics* 16, 275-302.
- Holmberg, Anders and Thorbjörg Hróarsdóttir (2003) "Agreement and Movement in Icelandic Raising Constructions," *Lingua* 113, 997-1019.
- Kathol, Andreas and Robert D. Levine (1993) "Inversion as a Linearization Effect," *NELS* 23, 207-221.
- Kitahara, Hisatsugu (1997) *Elementary Operations and Optimal Derivations*, MIT Press, Cambridge, MA.
- McGinnis, Martha (1998) "Locality and Inert Case," *NELS* 28, 267-281.
- Nishihara, Toshiaki (1999) "On Locative Inversion and *There*-constructions," *English Linguistics* 16, 381-404.
- Polinsky, Maria and Eric Potsdam (2012) "Diagnosing Covert A-movement," ms., Harvard University and the University of Florida. <<http://ling.auf.net/lingbuzz/001232>>
- Postal, Paul M. (1974) *On Raising: One Rule of English Grammar and Its Theoretical Implications*, MIT Press, Cambridge, MA.
- Postal, Paul M. (1977) "About a 'Non-argument' for Raising," *Linguistic Inquiry* 8, 141-155.
- Postal, Paul M. (2004) *Skeptical Linguistic Essays*, Oxford University Press, Oxford.
- Rizzi, Luigi (1990) *Relativized Minimality*, MIT Press, Cambridge, MA.
- Wu, Hsiao-hung Iris (2008) *Generalized Inversion and the Theory of Agree*, Doctoral dissertation, MIT.