Derivation of the Experiencer Subject of Transitives Verbs*
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1. Introduction

This paper examines the syntax of the experiencer subject (henceforth, Exp-Sub) as in (1):

(1)　*Taroo-ga* asi-o　　ot-ta
　　　Taro-Nom leg-Acc break-Past
　　　　'Taro broke his leg'

I argue, along the lines of Hasegawa (2001), that the Exp-Sub in (1) is a VP-internal argument, despite the fact that the sentence has an accusative DP, which should not appear if Burzio's Generalization in (2) is correct:

(2)　Burzio's Generalization (Burzio (1981, 1986)):
　　　If a verb does not assign an external role, it does not assign Accusative Case.

In what follows, I provide several empirical arguments that the subject of (1) is derived from a VP-internal position, in contrast to the agentive subject as in (3), which is generated in a VP-external position:

(3)　*Taroo-ga*　aitesensyu-no asi-o　　ot-ta
　　　Taro-Nom opponent-of　leg-Acc break-Past
　　　　'Taro broke the opponent's leg'

I also discuss those unaccusative sentences that have an agentive subject and provide empirical evidence that the agentive subject of unaccusatives is a VP-external argument.

2. Exp-Sub of Transitives

It is typical for transitive verbs to take the agentive subject:

(4)　Taroo-ga　Ziroo-o　　tatai-ta
　　　Taro-Nom Ziro-Acc pat-Past
　　　　'Taro patted Ziro'

I assume, with Kratzer (1993) and Chomsky (1995) among others, that the agentive subject is generated in the Spec of the light verb v:

(5)　... [$_{vP}$ [$_{DP}$ Taro] v ... [$_{VP}$ V [$_{DP}$ Ziro]]]

That the agentive subject is generated outside VP is empirically supported by Nakayama and Koizumi (1991). They show that an agentive subject cannot take narrower scope than a VP-modifying adverb, in contrast to the subject of a passive and unaccusative verb:

(6) a. Agentive subject:

daremo-ga   2-zi-ka   3-zi-ni   repooto-o   teisyutusi-ta
everyone-Nom 2-hour-or 3-hour-at report-Acc submit-Past
'Everyone submitted the report at 2 or 3 o'clock'
(every > 2 or 3, * 2 or 3 > every)

b. Passive subject:

daremo-ga   keikan-niyotte 2-zi-ka   3-zi-ni   taihos-are-ta
everyone-Nom policeman-by 2-hour-or 3-hour-at arrest-Pass-Past
'Everyone was arrested at 2 or 3 o'clock by a policeman'
(every > 2 or 3, 2 or 3 > every)

c. Unaccusative Subject:

daremo-ga   2-zi-ka   3-zi-ni   koron-da
everyone-Nom 2-hour-or 3-hour-at fall-down-Past
'Everyone fell down at 2 or 3 o'clock'
(every > 2 or 3, 2 or 3 > every)

Now consider the following examples:

(7) a. Taroo-ga   asi-o   ot-ta
Taro-Nom leg-Acc break-Past
'Taro broke his leg'

b. Hanako-ga   koron-de   sukii-ita-o hazusi-ta
Hanako-Nom fall-down-Ger ski-Acc   take-off-Past
'Falling down, Hanako had her skis taken off'

What is characteristic of these examples is that the subject DP does not denote the agent of the described event. Rather, the subject is understood to denote an experiencer who is "affected" by the described event in some way or another.

It is interesting to note at this point that some languages express the experiencer DP as a VP-internal argument:

(8) Korean (Cho (1992)):

Mary-ka   *John-ul*   phal-ul   pwutcap-ess-ta
Mary-Nom John-Acc arm-Acc grasp-Past
'Mary grasped John by the arm'

(9) French (Vergnaud and Zubizarreta (1992)):

Le médicin a   examiné   l'estomac   *aux   enfants*
the doctor   has examined the-stomach to-the children
'The doctor examined the children's stomach'

The experiencer DPs *John-ul* ((8)) and *enfants* ((9)) are realized with the Accusative and the Dative Case, respectively.

Now if Baker's (1988) Uniformity of Theta Assignment Hypothesis (UTAH) is correct, which requires that instances of arguments that bear the identical thematic role are generated in the identical position cross-linguistically, it is interesting to ask if the experiencer DPs in (7) are generated in an internal argument position, not in [Spec vP], where the agentive subject is generated. This prediction is borne out. Consider the following examples:

(10) a. daremo-ga   undoozyoo-ka taiikukan-de   asi-o   ot-ta
        everyone-Nom playground-or gymnasium-at leg-Acc break-Past
          'Everyone broke his leg on the playground or in the gymnasium'
          (every > or, or > every)

   b. daremo-ga   dai-3-ka dai-4-gerende-de sukii-ita-o hazusi-ta
        everyone-Nom third-or fourth-Gerände-at ski-Acc   take-off-Past
          'Everyone had his skis taken off on Slope Three or Slope Four'
          (every > or, or > every)

The contrast between (6a) and (10a-c) in the availability of the narrow scope construal of the subject with respect to the VP adverbial tells us that the subject in (10) is generated within VP, in contrast to the agentive subject in (6a). I propose that the subject in (10) is generated in a VP-internal position as in (11):[1, 2]

(11) [$_{v}$P ... [$_{VP}$ [$_{PP}$ undoozyoo-ka taiikukan-de] [$_{VP}$ [$_{DP}$ daremo-ga] [$_{V'}$ [$_{DP}$ asi-o] or]]]]

The proposed derivation of the Exp-Sub of transitive verbs in (11) is also supported by a test involving a floating quantifier (henceforth, FQ). I assume the following constraint first proposed in Miyagawa (1989):

(12) An FQ and its host DP must c-command each other.

As the following examples show, it is impossible (or at least difficult) for an agentive subject to host an FQ in VP:

(13) a. ??gakusei-ga [$_{VP}$ undoozyoo-de 3-nin koeda-o ot-ta]
          student-Nom   playground-at 3-Cl twig-Acc break-Past
            'Three students broke a twig on the playground'

   b. ??gakusei-ga [$_{VP}$ rozzi-de issyookenmei 3-nin sukii-ita-o hazusi-ta]
          student-Nom   lodge-at hard   3-Cl ski-Acc   take-off-Past
            'Three students took off the skis with all the might at the lodge'

These sentences are at best marginal since the agentive subject, generated in [Spec v], is not c-commanded by the VP-internal FQ.[3]   Now consider:

(14) a. gakusei-ga [$_{VP}$ undoozyoo-de 3-nin asi-o   ot-ta]
          student-Nom   playground-at 3-Cl leg-Acc break-Past
            'Three students broke their leg on the playground'

b. gakusei-ga [$_{VP}$ dai-3-gerende-de 3-nin sukii-ita-o hazusi-ta
student-Nom   third-Gerände-at 3-Cl ski-Acc   take-off-Past
'Three students had their skis taken off on Third Slope'

The grammatical contrast between (13) and (14) is accounted for by our analysis. The sentences in (14) are grammatical since the Exp-Sub is generated within VP so as to have a mutual c-command relation with the FQ.

Furthermore, we find two more pieces of evidence for the claim that the Exp-Sub of a transitive verb is derived from an internal argument position.   The first of these has to do with the so-called VP-preposing.   Hoji, Miyagawa and Tada (1988) observe that VP-preposing in Japanese cannot apply to the VP headed by an unaccusative verb:

(15) a. Agentive transitive:

[$_{VP}$ susi-o   tabe-sae]$_i$ John-ga t_i si-ta
sushi-Acc eat-even John-Nom do-Past
'Lit. Even eat sushi, John did'

b. Unaccusative:

*[$_{VP}$ huri-sae]$_i$ ame-ga t_i si-ta
fall-even   rain-Nom do-Past
'Lit. Even fall, rain did'

The contrast between (15a) and (15b), as Hoji, Miyagawa and Tada claim, derives from the fact that the preposed VP constituent in (15b) contains the unbound trace of the subject, which violates Fiengo's (1974) Proper Binding Condition (PBC):

(16) Proper Binding Condition:

Traces must be bound.

In (15b), whose representation is given in (17), the trace of the derived subject is not c-commanded by its antecedent, which leads to the violation of PBC:

(17) *[[$_{VP}$ t_i huri-sae]$_j$ [$_{Agr-P}$ ame$_i$-ga t_j si-ta]]

On the other hand, (15a), whose structure is given as (18), does not violate PBC since its subject is assumed to be generated outside VP, namely [Spec vP]:

(18) [[$_{VP}$ susi-o tabe-sae]$_j$ [$_{Agr-P}$ John$_i$-ga [$_{vP}$ t_i t_j si-ta]]

If the above analysis of VP-preposing is correct, we predict that VP-preposing cannot apply to Exp-Sub sentences since the Exp-Sub, as we propose, is generated inside the VP.   This prediction is borne out.   Consider the following examples:

Agentive subject:

(19) a. Oonita-ga [sono siai-de Chooshuu-no asi-o   ori-sae]   si-ta
Oonita-Nom that match-in Chooshuu-of leg-Acc break-even do-Past
'Onita even broke Choshu's leg in the match'

    b. [sono siai-de Chooshuu-no asi-o ori-sae]$_i$ Oonita-ga t_i sita

(20) a. boikottosi-taku-te Taroo-ga [okotte sukii-ita-o hazusi-sae] si-ta

        boycott-want   Taro-Nom angry ski-Acc   take off-even do-Past

           'Wanting to boycott the race, Taro even took off his skis'

    b. boikottosi-taku-te [okotte sukii-ita-o hazusi-sae]$_i$ Taroo-ga t_i sita

Exp-Sub:

(21) a. tyoosi-ga   warukute Oonita-ga [siai-de   asi-o   ori-sae]

        condition-Nom bad   Oonita-Nom match-in leg-Acc break- even

        si-ta

        do-Past

           'Because the condition was bad, Oonita even broke his leg in

           today's match'

    b.* tyoosi-ga warukute [siai-de asi-o ori-sae]$_i$ Oonita-ga t_i si-ta

(22) a. akutenkoo-de   Taroo-ga [kansyamen-de suki-ita-o hazusi-

        bad weather-since Taro-Nom gentle slope-on ski-Acc   take off-

        sae]   si-ta

        even do-Past

           'Because of the bad weather, Taro even took off his skis on a

           gentle slope'

    b.* akutenkoo-de [kansyamen-de suki-ita-o hazusi-sae]$_i$ Taroo-ga t_i si-ta

The application of VP-preposing is possible in (19-20) for the same reason as in (15a). What is noteworthy is the fact that VP-preposing results in ungrammaticality in (21-22), in which the context forces the experiencer interpretation on the subject. This is so, since the preposed VP, as we propose, contains the unbound trace of the Exp-Sub:

(23) a. * [siai-de t_j asi-o ori-sae]$_i$ Oonita$_j$-ga t_i sita

    b. * [kansyamen-de t_j suki-ita-o hazusi-sae]$_i$ Taroo$_j$-ga t_i sita

Note that if (21b) and (22b) are ever fine, they need to have the agentive reading of the subject, which will not fit in the context provided.

    The other piece of evidence for our analysis of the Exp-Sub comes from what is called VP-clefting, a phenomenon discussed in Nakayama and Koizumi (1991). Nakayama and Koizumi point out that VP-clefting is impossible with unaccusative and passive verbs, whereas it can be applied to those VPs whose subject is generated outside the VP:

(24) Transitive:

        Taroo-ga e_i si-ta-no-wa   [syorui-o   teisyutusuru]$_i$ koto-da

        Taro-Nom do-Past-Gen-Top document-Acc submit   fact-is

'What Taro did is to submit the document'

(25) Unergative:

gakusei-ga e_i si-ta-no-wa   [geragera   warau]$_i$ koto-da
student-Nom do-Past-Gen-Top uproariously laugh   fact-is

    'What the student did is to laugh uproariously'

(26) Unaccusative:

*John-ga e_i si-ta-no-wa   [attoiumani sinu]$_i$ koto-da
John-Nom do-Past-Gen-Top suddenly   die   fact-is

    'What John did is to die suddenly'

Now if our analysis of the Exp-Sub is correct, we predict that it is impossible to cleft the VP of Exp-Sub sentences. This prediction is indeed borne out:

(27) a. *tyoosi-ga   warukete Oonita-ga e_i si-ta-no-wa
condition-Nom bad   Oonita-Nom do-Past-Gen-Top

[siai-de   asi-o   oru]$_i$ koto-da
match-at leg-Acc break fact-is

     'Because of the bad condition, what Oonita did is to break his
     leg in the match'

b.* akutenkoo-de Taroo-ga e_i si-ta-no-wa   [kansyamen-de
bad weather   Taroo-Nom do-Past-Gen-Top gentle slope-on

sukii ita-o hazusu]$_i$ koto-da
ski-Acc   take off fact-is

     'Because of the bad weather, what Taro did is to take off his skis
     on a gentle slope'

Thus this constitutes still another piece of evidence that the Exp-Sub of transitive verbs derives from a VP-internal position.

3. Consequences

    The analysis proposed in Section 2 treats the Exp-Sub on a par with the subject of unaccusatives in the sense that the Exp-Sub derives from an VP-internal position. Then one may expect that there are other phenomena in which the Exp-Sub behaves like the unaccusative subject. In fact, we find two semantic facts in which the Exp-Sub and the unaccusative subject exhibit a parallel behavior.

3.1 *Interpretation of* Te-iru

    As has been often pointed out in the literature, sentences with *te-iru* are interpreted as either progressive or resultative:

(28) a. Yamada-san-ga   hasit-te i-ru

Yamada-Mr.-Nom run-Ger be-Pres

    'Mr. Yamada is running'   (progressive)

b. koppu-ga   koware-te i-ru

  glass-Nom break-Ger be-Pres

    'The glass is broken'   (resultative)

Takezawa (1991) points out that the resultative reading of *te-iru* is possible with unaccusatives and passives, but not with transitives and unergatives. In other words, only those verbs with the internal subject can yield a resultative reading of *te-iru*. Takezawa also observes that sentences involving inalienable possession can also be interpreted as resultative:

(29) Yamada-san-ga   asi-o   itame-te i-ru

    Yamada-Mr.-Nom leg-Acc hurt-Ger be-Pres

      'Mr. Yamada has hurt his leg'   (Takezawa (1991))

Although Takezawa is only concerned with the cases of inalienable possession, this semantic property is also shared by "alienable" possession cases. Consider:

(30) a. Schumacher-ga   kuruma-o butuke-te   i-ru

     Schumacher-Nom car-Acc   bump-Ger be-Pres

      'Schumacher has bumped his car'

b. Yamada-san-ga   sukii-ita-o hazusi-te   i-ru

   Yamada-Mr.-Nom ski-Acc   take-off-Ger be-Pres

     'Mr. Yamada has had his skis detached'

As we observed earlier, these sentences are potentially ambiguous between the agentive and the experiencer reading of the subject. The point is that when we interpret the subject as an experiencer, these sentences must be interpreted as resultative. That is, (30a) means, under the experiencer reading of the subject, that Schumacher has carelessly bumped his car with the resultative implication that Schumacher and his car are still at the accident site or that he is still racing in his damaged car. Likewise, (30b) describes the event in which Mr. Yamada fell down and had his skis detached, implying at the same time the result in which he has not yet reset his skis on his feet.

From the observation in (28) and (29) Takezawa draws a generalization that *te-iru* bears a resultative interpretation iff the subject "binds" an internal argument position. This is illustrated in (31):

(31) a. [$_{IP}$ [$_{DP}$ Yamada-san-ga] [$_{VP}$ hasit-te iru]]   ((28a))

b. [$_{IP}$ [$_{DP}$ koppu-ga]$_i$ [$_{VP}$ t_i koware-te iru]]   ((28b))

c. [$_{IP}$ [$_{DP}$ Yamada-san-ga]$_i$ [$_{VP}$ asi$_i$-o itame-te iru]]   ((29))

In (31b), the subject DP binds an internal position since this position is the trace

of the moved subject. For (31c), Takezawa assumes that the subject DP *Yamada-san-ga* "binds" the direct object DP in the sense the former and the latter bear an whole-part relation: *asi* 'leg' is an (inalienable) part of the whole (*Yamada-san*).

In our analysis, the structure of (31a) is given as follows:

(32) [$_{IP}$ [$_{DP}$ Yamada-san-ga]$_i$ [$_{VP}$ t_i asi-o itame-te iru]]

If so, we can obtain a more straightforward generalization as to the availability of the resultative interpretation with *te-iru*. The generalization is stated as follows:

(33) *Te-iru* has a resultative interpretation iff the subject is an internal argument.

Thus we can capture the above fact simply in terms of the derivation of the subject alone without positing the whole-part relation as another mode of binding.

3.2   *Interpretation of* Ta

The Exp-Sub of transitives and the unaccusative/passive subject exhibit a parallel behavior also with respect to the interpretation of the past tense/perfective marker *ta* in a relative clause. It is observed in Kageyama (1996) and Mihara (1998) that the relative clause containing *ta* can have a resultative interpretation only when an internal argument is relativized, while it can only have a past tense reading if an external argument is relativized. Thus the sentences in (34) are ambiguous between the resultative and the past tense reading, while those in (35) only have the past tense reading:

(34) a. [kowasi-ta]   omotya
         break (tr.)-Past/Perf toy
         (the direct object relativized, ambiguous)
                'the toy that was broken' or 'the broken toy'

   b. [koware-ta]   omotya
       break (intr.)-Past/Perf toy
       (the unaccusative subject relativized, ambiguous)
              'the toy that broke' or 'the broken toy'

   c. [kowas-are-ta]   omotya
       break-Pass-Past/Perf toy
       (the passive subject relativized, ambiguous)
              'the toy that got broken (by someone)' or 'the broken toy'

(35) [omotya-o kowasi-ta]   otoko$_i$
     toy-Acc   break (tr.)-Past man
     (the subject of a transitive relativized, past tense reading only)
         'the man who broke the toy'

Now if the present analysis of the Exp-Sub of transitives is correct, the relative

clause can denote the resultant state of the head noun when the Exp-Sub is relativized, since the Exp-Sub, as we propose, is an internal argument. This prediction is borne out:

(36) a. [asi-o ot-ta]   hito
      leg-Acc break-Past/Perf man
          'the man who broke his leg (He may have recovered now.)' or
          'the man with a broken leg (the man whose leg is still broken)'

   b. [sukii-ita-o hazusi-ta]   sensyu
      ski-Acc   take-off-Past/Perf skier
          'the skier who had his skis taken off' or 'the skier who has had
          his skis taken off (and is still lying with his skis off)'

These sentences are ambiguous between the past tense and the resultative reading of the relative clause containing *ta*. Furthermore, if we force an agentive reading on these sentences, they can no longer have the resultative reading. This can be captured if we say that the non-agentive Exp-Sub of a transitive verb is an internal argument of the verb, on a par with that of unaccusatives and passives.

4. A Problem

We have just seen that the Exp-Sub verbs behave semantically on a par with unaccusative verbs, which suggests that the Exp-Sub derives from a VP-internal position. However, the above two semantic properties are shared by a particular group of verbs that take an agentive subject. This group of verbs includes the verb *kaburu* 'put on', for example:[4]

(37) a. Taroo-ga   boosi-o kabut-ta
      Taro-Nom hat-Acc put on-Past
        'Taro put a hat on'

   b. Taroo-ga   boosi-o kabut-te   i-ru
      Taro-Nom hat-Acc put on-Ger be-Pres
        'Taro is wearing a hat'

   c. [boosi-o kabut-ta]   hito
      hat-Acc put-on-Past person
        'a person who is wearing a hat'

We can understand the subject in (37a) as denoting the agent of the events described. In fact, the VP of this sentence can be preposed since the agentive subject is assumed to generate in [Spec *v*P]:

(38) [boosi-o kaburi-sae]$_i$ Taroo-ga t_i si-ta
     hat-Acc put-on-even Taro-Nom do-Past

'Lit. Even wear a hat Taro did'

Now let us consider the interpretation of (37b-c). It will be easy to see that (37b) can denote the resultant state of the subject (resultative reading) while they can also be interpreted as describing an on-going action of the subject (progressive reading). Also the relative clause of (37c) may be taken to denote the resultant state of the head noun.

Now the problem posed by the above fact is that the arguments in 3.1 and 3.2 for the internal-argumenthood of the Exp-Sub may not be real arguments for our analysis since the relevant interpretation of the *te-iru* form and the relative clause also holds for the sort of agentive predicates that we have just observed.

To solve this problem, let us first consider the semantics of sentence (37a). In this example, the subject undergoes a change of state while it also plays the initiator (agent) of the described event. The subject *Taroo* intentionally carries out the action of putting a hat on himself and as a result he turns into the state of wearing a hat on. We may say in other words that the subject plays the multiple roles of the agent and the experiencer. But how can we implement the theorization of this intuition?

Let us assume à la Hornstein (2001) that an argument DP can be associated with more than one theta-role in the course of derivation. Thus, as Hornstein proposes, the control relation between a DP and *PRO* is reduced to the movement relation so that a single DP may be associated with more than one theta role. This is illustrated below:

(39) a. Standard control structure:

John tried [*PRO* to win the race]

<Agent>   <Agent>

b. Hornstein (2001):

$John_i$ tried [t_i to win the race]

<Agent>   <Agent>

We may extend Hornstein's analysis of control relation to the derivation of the agentive Exp-Sub. Let us assume that the agentive Exp-Sub is generated in a VP-internal position where it is associated with the thematic role of Experiencer, and that it then moves into the Spec of the agentive v, where it is associated with the Agent role. This is illustrated in (40):[5]

(40) $[_{vP}$ $[_{DP}$ Taroo$]_i$ $[_{v'}$ v $[_{VP}$ t_i boosi-o kabur- $]]]$

<Agent>   <Experiencer>

The minimal difference between the non-agentive and the agentive Exp-Sub is that while the former receives one theta role in its original position the latter

receives the Agent role in [Spec *v*P] as well. This difference is parallel to that between the control and the raising construction in Hornstein's analysis in the sense that the subject of the former receives multiple theta roles whereas the subject of the latter receives one theta role in its underlying position:

(41) a. John$_i$ tried [t_i to win the race]
                         <Agent> <Agent>

    b. John$_i$ seems [t_i to have won the race]
                             <Agent>

This analysis provides us a solution to the problem raised at the beginning of this section. We can say that the resultative interpretation obtains with *te-iru* and the relative clause with *ta* when the subject originates in the VP-internal position.

If the above analysis is correct, then we expect that the agentive and the non-agentive Exp-Sub exhibit the behavior parallel to the subject of the control and the raising construction, respectively. The first parallel behavior has to do with the scopal property of the subject. May (1977) observes that the matrix subject of the raising construction can either take wide or narrow scope with respect to the raising verb:

(42) Someone seems to have won the race.

(43) a. [∃x: x = a person](seems (x to have won the race))

    b. (seems ([∃x: x = a person](x to have won the race)))

Likewise, the non-agentive Exp-Sub can take scope narrower than the VP-adverbial:

(44) daremo-ga   2-zi-ka   3-zi-ni   asi-o   otta
     everyone-Nom 2-hour-or 3-hour-at leg-Acc break-Past
       'Everyone broke his leg at 2 or 3 o'clock'
       (every > or, or > every)

On the other hand, the narrow scope interpretation is impossible for the subject of the control construction:

(45) Someone tried to win the race.

(46) a. [∃x: x = a person] (x tried (x to win the race))

    b.* (x tried ([∃x: x = a person] (x to win the race)))

In contrast to the non-agentive Exp-Sub in (44), it is impossible for the agentive Exp-Sub to take narrow scope with respect to a VP-adverbial:

(47) daremo-ga   2-zi-ka   3-zi-ni   yunifoomu-o ki-ta
     everyone-Nom 2-hour-or 3-hour-at uniform-Acc   put on-Past
       'Everyone put on his uniform at 2 or 3 o'clock'
       (every > or, *or > every)

This fact, however, only leads to the conclusion that the agentive Exp-Sub is associated with the VP-external position. It is also compatible with an analysis in which the subject DP is associated with the VP-external position, but not with a VP-internal position for the Experiencer role. In order to see that the agentive Exp-Sub is also associated with a VP-internal position, let us see if it can host a VP-internal FQ. Recall that a non-agentive Exp-Sub can be associated with a VP-internal FQ:

(48) sensyu-ga   attoiumani 3-nin asi-o   otta

     player-Nom suddenly   3-CL leg-Acc break-Past

     'Three players broke their leg suddenly'

It is also possible for an agentive Exp-Sub to host a VP-internal FQ:

(49) sensyu-ga   attoiumani 3-nin yunifoomu-o kita

     player-Nom suddenly   3-nin uniform-Acc put on-Past

     'Three players put on their uniform suddenly'

This property is also found with both the raising and the control construction: they both allow an FQ in the complement clause:

(50) a. *The men* hoped [to have *all* eaten supper by 6]

     b. *The men* are unlikely [to have *all* eaten supper by 6]

(Hornstein (2001))

It is important to note here a difference between the agentive Exp-Sub and the canonical agentive subject. While neither of these subjects are able to take narrower scope than a VP-adverbial, they differ from each other in that only the agentive Exp-Sub allows an FQ in a VP-internal position:

(51) a. Pure agentive:

     *gakusei-ga   [$_{VP}$ attoiumani 3-nin niku-o   kitta]

     student-Nom   suddenly   3-CL meat-Acc cut-Past

     'Three students cut meat suddenly'

     b. Agentive experiencer:

     gakusei-ga [$_{VP}$ attoiumani 3-nin yunifoomu-o kita]

     student-Nom suddenly   3-CL uniform-Acc put on-Past

     'Three students put their uniform suddenly'

The reason why the agentive experiencer allows an FQ VP-internally is that it is base-generated in a VP-internal position, the first theta-position, and is raised to the subject position, the second theta-position, where it is associated with the agentive role. The pure agentive subject cannot be associated with a VP-internal FQ since it is base-generated in the VP-external position without being associated to any VP-internal position.

5.   Unaccusatives with External Argument Subject

So far we have discussed the case in which the verb has a VP-internal argument subject but still assigns Accusative Case to its object. This provides further empirical evidence to Hasegawa's (2001) idea that there is no conspiracy between the external theta role and the Accusative Case, contra Burzio's Generalization. Hasegawa also argues that it is possible for a verb to have no Accusative Case to assign but to have an external argument subject, since the occurrence of an external argument is independent of the Accusative Case. This is the case with unaccusative verbs that take an agentive subject. This section provides further evidence for Hasegawa's proposal.

Unaccusative verbs take the Theme subject whose referent typically undergoes a change of state or a physical motion. Some of them, however, can take an agentive subject whose referent intentionally carries out an action denoted by the verb:

(52) a.   Taroo-ga   wazato   koron-da
        Taro-Nom intentionally fall down-Past
          'Taro fell down intentionally'

    b.   Hanako-ga   wazato   butai-no ue-kara oti-ta
        Hanako-Nom intentionally stage-of top-from fall-Past
          'Hanako intentionally fell from the stage'

Let us assume, as with Hasegawa (2001), that the subject DPs in (52) is base-generated in the object position, where it is associated with the Theme role, and is then raised to [Spec vP] where it is associated with the Agent role. This derivation is illustrated in (53):

(53) a.   Unaccusatives with Theme Subject:
       [DP$_i$ [$_{VP}$ t_i V]]
                 <Theme>

    b.   Unaccusatives with Agentive Subject:
       [DP$_i$ v [$_{VP}$ t_i V]]
        <Agent>   <Theme>

Then we predict that the agentive subject of unaccusatives behaves in a parallel fashion to the agent Exp-Sub with respect to its scope property. Nakayama and Koizumi (1991) point out that the subject of unaccusatives may take either narrow or wide scope with respect to a VP-modifying adverbial:

(54) daremo-ga   2-zi-ka   3-zi-ni   sin-da
     everyone-Nom 2-hour-or 3-hour-at died

'Everyone died at 2 or 3 o'clock'

Now compare:

(55) a. hutyuui-de daremo-ga   2-zi-ka 3-zi-ni   koron-da
         carelessly   everyone-Nom 2-hour-or 3-hour-at fall down-Past
         'Everyone fell down out of carelessness at 2 or 3 o'clock'

b. bikkurisase-taku-te daremo-ga   2-zi-ka   3-zi-ni
    surprise-want-Ger everyone-Nom 2-hour-or 3-hour-at
    koron-da
    fall down-Past
    'Everyone fell down at 2 or 3 o'clock trying to surprise someone'

The situation described in (55a) is an usual one and is typical of unaccusative verbs with the Theme subject. The scope pattern in (55a) is just the same as in (54). In contrast, (55b) illustrates the situation in which the subject intentionally carries out the described action of falling down. The scopal property of the subject in (55b) contrasts that of (55a): the subject in (55b) cannot have narrow scope with respect to the adverbial. This constitutes evidence for the claim that unaccusative verbs can take the external argument subject.

6. Conclusion

This paper has examined the syntactic derivation of the Exp-Sub of transitive verbs and provided some empirical evidence for the claim originally made in Hasegawa (2001) that thematic roles and Cases are two distinct mechanisms, contra Burzio's Generalization which crucially states the conspiracy between these two mechanisms. Furthermore, it has also provided further support for Hasegawa's analysis of the agentive subject of unaccusative verbs, again leading to the conclusion that the theta role and the Case are two independent mechanisms of the grammar.

NOTES

[1] In Hasegawa's (2001) analysis, the experiencer subject derives from inside the accusative DP which denotes a thing that is (inalienably) possessed by the person denoted by the subject. Thus the relevant portion of the structure of (1) is represented as in (i):

(i) [$_{DP}$ Taro]$_i$.. [$_{VP}$ t'_i [$_{DP}$ t_i asi]-o ot-ta]
                    <Experiencer> <Possessor>

Hasegawa supports her "possessor-raising" analysis by observing that the accusative DP, from

which she claims the subject DP originates, cannot have an overt possessor:

(ii) * Taroo-ga zibun-no asi-o ot-ta

Taro-Nom self's leg-Acc break-Past

'Taro broke the leg of himself'

It seems to me, however, that the grammaticality of a sentence with an overt possessor such as (iii) is significantly improved in a certain appropriate context (Homma (1995)):

(iii) Taroo-wa hito-no asi-zya-nakute zibun-no asi-o otta-ndayo

Taro-Top person-of leg-be-Neg self-of leg-Acc break-Past-Prt

'Taro broke the leg of himself, not anyone else's!'

Thus there is a reason to say that the experiencer subject originates outside the accusative DP, as we propose in (11).

[2] This analysis of the experiencer subject is also along the lines with Homma (1995), in which I analyze the subject of the possessor passive as originating in a VP-internal position. The position for the experiencer subject in (11) may be taken to be identical to that for the possessor passive subject.

[3] It must be accounted for why the sentences in (13) are not totally ungrammatical. The acceptability of the sentences seem to improve if we force a "multiple event" reading, as Ishii (1998) points out. If we force a "single event" reading by adding the adverbial *totuzen* 'suddenly', it is impossible to relate the FQ to the subject DP. To give judgments on an equal condition, I intend the grammaticality of (13) and (14) to be the result of forcing a "single event" reading on the examples.

[4] The other verbs of this group include *kiru* 'put on' and *nugu* 'put off', to mention a few. The interpretation of *te-iru* preceded by these verbs is discussed in Takezawa (1991).

[5] This process is also assumed in Hasegawa (2001).

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